



# EPA's 2008 Report on the Environment

presents indicators  
that help answer  
important questions  
about human health  
and the environment

[www.epa.gov/roe](http://www.epa.gov/roe)





All ROE indicators were peer-reviewed against an indicator definition and criteria to ensure that they are useful, objective, transparent, and scientifically reliable.

## The U.S. Environmental Protection Agency's 2008 Report on the Environment (ROE)

presents an extensive set of indicators on environmental status and trends to EPA and to interested scientists and members of the public. The ROE:

- **Helps EPA and the public assess** the condition of human health and the environment and how it is changing over time.
- **Provides valuable input** to EPA's planning and strategic thinking.
- **Creates partnership opportunities** for monitoring and reporting environmental condition.

The 2008 ROE, available at [www.epa.gov/roe](http://www.epa.gov/roe):

- **Asks questions** about environmental trends that are important to EPA.
- **Answers these questions**, to the extent possible, using high quality indicators.
- **Discusses the critical indicator gaps, limitations, and challenges** that prevent the questions from being fully answered.

EPA is committed to keeping the ROE current and relevant by adding new indicators and updating indicators as new data become available.

### Inside the ROE

#### WATER

- Extent and/or condition of fresh surface waters, ground water, wetlands, and coastal waters
- Drinking water quality
- Condition of recreational waters and consumable fish and shellfish

#### AIR

- Outdoor and indoor air quality
- Greenhouse gas emissions and concentrations

#### LAND

- Land cover and land use
- Chemicals used on the land
- Wastes and contaminated land

#### HUMAN EXPOSURE AND HEALTH

- Human exposure to environmental contaminants
- U.S. health status
- Human disease and conditions for which environmental contaminants may be a risk factor

#### ECOLOGICAL CONDITION

- Extent, distribution, diversity, biological balance, ecological processes, and critical physical and chemical attributes of the nation's ecological systems
- Biomarkers of exposure to environmental contaminants in plants and animals



## The ROE Questions

The 23 ROE questions ask about trends in:

- Stressors to air, water, and land and their effects on human health and the environment.
- Human exposure and health and the condition of the environment.

For example: *What are the trends in...*

*....outdoor air quality and their effects on human health and the environment?*

*....the quality of drinking water and their effects on human health?*

*....land cover and their effects on human health and the environment?*

*....human exposure to environmental contaminants?*

*....the extent and distribution of the nation's ecological systems?*

## The ROE Indicators

To answer these questions, the ROE presents 86 environmental indicators that:

- Meet high standards for quality, objectivity, and transparency.
- Are based on measurements of environmental and human health conditions over time.
- Present trends when adequate data are available or establish reliable national baselines when they are not.
- Are national (and in some cases regional) in coverage.
- Underwent extensive public comment and peer review.

EPA's Report on the Environment represents a commitment by EPA to continually improve the quality and quantity of information available on the condition of human health and the environment and how it is changing over time.

## Additional Information and Updates

Visit [www.epa.gov/roe](http://www.epa.gov/roe) to access:

- The underlying data, metadata, references, and peer review documentation for the ROE indicators.
- *EPA's 2008 Report on the Environment: Highlights of National Trends*, which presents highlights of the ROE for the interested public.
- Future updates of the ROE indicators.





United States  
Environmental Protection  
Agency

Office of Research and Development  
National Center for Environmental Assessment  
Washington, DC 20460

Official Business  
Penalty for Private Use  
\$300

EPA/600/F-08/002  
May 2008  
[www.epa.gov](http://www.epa.gov)

For more information, contact:

Denice M. Shaw, Ph.D (ROE Project Lead)  
National Center for Environmental Assessment  
Office of Research and Development  
U.S. Environmental Protection Agency  
Washington, DC 20460  
[ROE@epa.gov](mailto:ROE@epa.gov)

