

ONE PLANET, MANY PEOPLE: ATLAS OF OUR CHANGING ENVIRONMENT

In celebration of World Environment Day on June 3, 2005, the United Nations Environment Programme (UNEP) in cooperation with the University of Maryland, National Aeronautics and Space Administration (NASA), and U.S. Geological Survey (USGS) announced the publication of *One Planet, Many People: Atlas of Our Changing Environment*. Using satellite imagery and other photos, the atlas vividly illustrates some of the changes—both good and bad—that humans have brought about on Earth over the past 30 years. This is the first publication of some of these satellite images.

The atlas presents visual evidence of global environmental change, including some of the following, that have resulted primarily from human-induced activities:

- Half the world's wetlands were lost during the last century.
- Logging and changes in land use have reduced forest cover by at least 20% and possibly as much as 50%.
- Nearly 70% of the world's major marine fish stocks are either over-fished or being fished at the biological limit.
- Over the last half century, soil degradation has affected two-thirds of the world's agricultural land. Scientists estimate that each year some 250 billion metric tonnes (276 billion tons) of fertile topsoil—

the equivalent of all of the wheat fields in Australia—are lost globally.

- Each year, an estimated 27,000 species disappear from the planet—approximately one every 20 minutes.
- Dams and engineering works have fragmented 60% of the world's large river systems. They have so impeded water flow that the time it takes for a drop of water to reach the sea has tripled.
- Human activities are significantly altering the basic chemical cycles upon which all ecosystems depend.

With respect to the United States, the atlas chronicles the growth of the Fort Lauderdale-Miami area over the past 30 years clearly showing the conversion of farmland into cityscapes and the spread of Miami south and west towards Everglades National Park. Images in the atlas show the massive development of oil and gas wells in the Upper Green River, Wyoming, which is visible from space. On the other hand, one of the most striking features of satellite images of San Francisco, California, is the preservation of its urban forests over the past 30 years.

The images and statistics document the remarkable changes and serve as a warning for environmental events that may occur in the future. The atlas demonstrates how our growing population and its consumption patterns are shrinking our natural resource base. With respect to resource management in the National Park System, *One Planet, Many People: Atlas of Our Changing Environment* may be useful as a basis for developing policy decisions that acknowledge environmental uncertainties and promoting individual actions to help manage resources in a way that sustains natural systems and ensures the long-term well-being of humans and other life-forms.

The complete text and graphics of *One Planet, Many People: Atlas of Our Changing Environment* are available at <http://www.na.unep.net>.