

New Report on Ecosystems and Climate Change

(Washington, D.C. - June 20, 2008) The U.S. Environmental Protection Agency has released a report that can help reduce the potential impact of climate change on estuaries, forests, wetlands, coral reefs, and other sensitive ecosystems. The report, entitled Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources, identifies strategies to protect the environment as these changes occur.

"People always say 'Don't just tell us what will happen - tell us what we can do about it,'" said Dr. George Gray, assistant administrator for EPA's Office of Research and Development. "By using the strategies outlined in this document, we can help managers protect our parks, rivers, and forests from possible future impacts of a changing climate."

To develop this assessment, scientists studied national parks, national forests, national wildlife refuges, wild and scenic rivers, national estuaries, and marine protected areas - all protected by the federal government. The report takes a unique approach by using the management goals set for each protected area to understand what strategies will increase the resilience of each ecosystem - in other words, increase the amount of change or disturbance that an ecosystem can absorb before it shifts to a different ecosystem. Using these strategies, managers can maintain the original goals set for these ecosystems under changing climatic conditions. The strategies will be useful to federal agencies and can also be broadly applied to lands and waters managed by other government or nongovernmental organizations.

The report finds that climate change can increase the impact of traditional stressors (such as pollution or habitat destruction) on ecosystems, and that many existing best management practices to reduce these stressors can also be applied to reduce the impacts of climate change. For example, current efforts to reverse habitat destruction by restoring vegetation along streams also increase ecosystem resilience to climate change impacts, such as greater amounts of pollutants and sediments from more intense rainfall. Our country's ability to adapt to climate change will depend on a variety of factors including recognizing the barriers to implementing new strategies, expanding collaboration among ecosystem managers, creatively re-examining program goals and authorities, and being flexible in setting priorities and managing for change.

The peer-reviewed report provides the best-available science to date on management adaptations for ecosystems and resources. It was developed following the guidelines developed by the U.S. Climate Change Science Program.

The Global Change Research Program in EPA's Office of Research and Development led the development of the report. It is one of 21 synthesis and assessment products commissioned by the CCSP.

The CCSP was established in 2002 to provide the Nation with science-based knowledge to manage the risks and opportunities of changes in the climate and related environmental systems. The program is responsible for coordinating and integrating the research of 13 federal agencies on climate and global change.

For more information on Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources: <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=180143>

The Office of Research and Development's Global Change Research Program:

<http://www.epa.gov/ord/npd/globalresearch-intro.htm>

The U.S. Climate Change Science Program (CCSP): <http://www.climatechange.gov/>