





November, 2007

Climate Change, People, and Forests and Rangelands

Issue: Climate change affects forest and range ecosystems and the relationships people have with those places. Population distribution, economic activity, quality of life, and many other human values are influenced by changes in natural environments. Understanding human behaviors and responses will improve management strategies designed for changing climate conditions.

Key Points:

- The social and economic effects of climate change are diverse, likely to vary widely positively and negatively and both spatially and through time.
- Climate change will influence the human activities, benefits, and impacts of surrounding forests and rangelands.
- More than half the U.S. population lives within coastal zones, and increasingly more people, houses, and wealth are concentrated in areas facing significant hazard levels.
- Urban and suburban expansion into forests and rangelands are likely to shift in response to climate change. Population shifts may cause new resource-related human conflicts, and create unforeseen impacts on already stressed urbanized ecosystems.
- Outdoor recreation opportunities are likely to change, with resulting changes in public expectations and seasonality of use.
- Trade-off analyses and other socio-economic methodologies that compare immediate versus longer-term social, economic, and ecological effects of management actions could help policymakers analyze choices where there is a high degree of uncertainty about changing conditions.
- The 2005 Update to the Renewable Resources Planning Act Assessment looks at current conditions of the nation's forests and rangelands as well estimates trends 50 years into the future
- Urban forest inventory and monitoring systems are being tested and will provide early warnings of actions that are needed to protect and sustain these valuable ecosystems.

For more information contact: Linda Langner, RPA Assessment Research, U.S. Forest Service. Phone (703) 605-4886. E-mail: llangner@fs.fed.us; Ed Dickerhoof, Urban Forestry Research, US Forest Service. Phone (703) 605-5120.