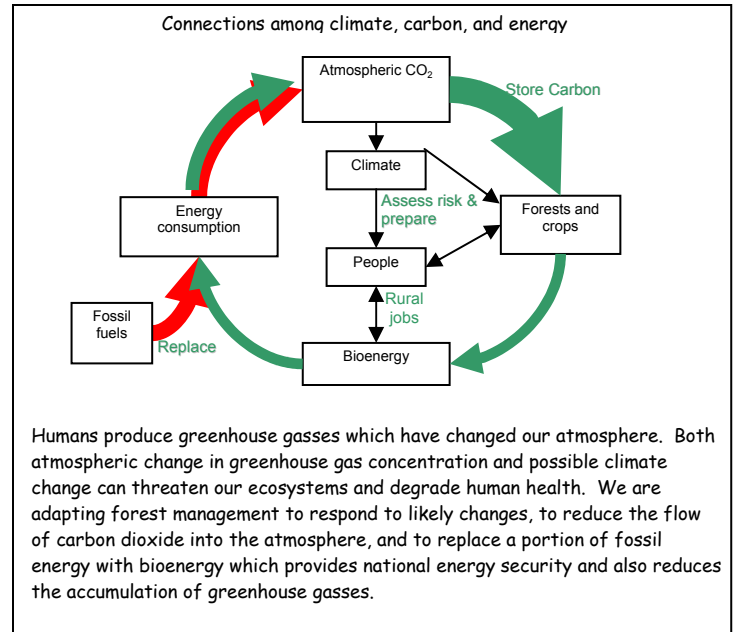


Global Climate Change, Research and Development, US Forest Service

The Research and Development mission area of the US Forest Service will invest about \$19 million in climate change-related science in 2007. An additional **\$30 million is needed** to meet planned actions so American forests and leading-edge science can help reduce the adverse impacts of global climate change. Below, describes the future science opportunities required to help solve the single most important issue facing sustainability today – Global Climate Change.



Climate Change Research Goal: By connecting climate change research and societal values, we foster innovative management solutions to sustain forests, forest-based values and quality of life.

What's Currently Being Done Through Forest Service Research?

- Assessing sensitivity of forest ecosystems, markets, and forest-based communities to climate change.
- Determining how to adapt forest management to reduce climate change impacts.
- Monitoring and mapping forest resources and maintain databases useful for climate impact assessment and greenhouse gas mitigation.
- Informing policymakers on climate change-based threats to forests.

Forest Service Research Opportunities to Help Control Climate Change:

- Anticipate how and where forests will change in response to climate, and develop best management practices to adapt to future conditions (+\$9,200,000).
- Improved inventory and monitoring systems are needed to efficiently estimate and verify changes in carbon stocks for forests and wood products. The long-term impacts of changing wildfire regimes on greenhouse gas emissions and sequestration is poorly understood (+\$6,000,000).
- We need to identify forest carbon management technologies that fully account for the impacts of actions on the full life cycle of carbon; and, develop the technology and strategy for increasing use of forest biomass for energy (+\$7,600,000).
- We need a better understanding and quantification of the potential benefits from different carbon management activities at the state level where programs are implemented, in the private sector, and for public land management (+\$7,200,000).

“...Forest Service Research and Development is an investment to ensure sustainable natural resources. Our ability to provide critical discovery and produce leading-edge technology that links environmental health with community well-being is profound.”