Capturing Market Interactions from Ecosystem Services Monetization

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Our Team, Our Work

• 5 branches
  – Climate Policy, Climate Science & Impacts, Greenhouse Gas Reporting Program, Non-CO2 Programs, Climate Economics

• Scope of CCD’s analytical work is broad
  – Domestic and international
  – Near-term and longer-term
  – Applied policy analysis and broader, longer-term analysis
  – Economy-wide issues as well as specific areas of emphasis
    • Economics, ecosystem valuation, non-CO2 gases, agriculture, forestry, bioenergy, climate science, international trade...

• Variety of models & modeling goals
  – Different horses for different courses
  – Need to identify the appropriate model(s)/model type to answer specific questions associated with various work areas
Role of Land Use Modeling

• The land use sector is unique
  – Land-based sources and sinks are inter-related, so are the markets
  – Environmental benefits (increase biodiversity, decrease erosion)
  – MRV Challenges: the transient nature of ecological systems & spatial and temporal variability/heterogeneity of ecological systems
  – Potentially inexpensive way to reduce net GHG emissions and increasing opportunities for farmers and foresters

• Analyzing land use and possible land use change are important to climate and energy policy-making
  – Mitigation: Cost containment, long-run climate stabilization
  – Energy: liquids and solids
  – Policy implications on markets and land use: direct and indirect, impacts on natural resources and the provision of ecosystem services
  – Impacts: land sectors sensitive to climate, also high adaptive potential
Session Outline

• Gregory Latta: Oregon State University
  – Evaluating Domestic Carbon Markets With Forest Sector Models

• Brent Sohngen: Ohio State University
  – Forest Carbon Emission Abatement and Sequestration in Global Context

• Bruce McCarl: Texas A&M University
  – Evaluating Climate Change and Associated Policy Implications for Agriculture

• Robert Beach: Research Triangle Institute
  – Modeling Economic and Environmental Impacts of Expanded U.S.A. Bioenergy Production

• Sara Ohrel: US EPA
  – Fitting It Together: Ecosystem Services-Related Modeling
Let’s Get Started!