Project Title: Changes in Forested Landscapes of the Northeastern U.S. Under Alternative Climate Scenarios

Headline Title (2-5 words): Climate Change Impacts on Northeast Forests

Brief Summary (Abstract): A project to understand and predict how forest composition, structure, and distribution in the Northeastern United States will respond to climate change.

Project Location: New England, Central Hardwoods, Central Appalachians, Northwoods

Partners: This project involves researchers from the University of Missouri, the University of Missouri-Columbia, the U.S. Forest Service Northern Research Station, the University of Wisconsin-Madison, and the University of Maine.

Background: Forests are a highly valued component of landscapes in the Northeastern United States. It is important to understand how forests might change in response to climate change so their benefits and values can continue to be received in the future. Forest landscape models are valuable tools for investigating effects of succession, disturbance, and land management on large landscapes and can be coupled with ecosystem models and applied to different climate scenarios to predict changes in forest landscapes in response to climate change.

Project Goals: Project researchers are working to predict how forests will change across the Northeast in response to climate change. The team will complete forest landscape modeling for the New England region under 4 alternative climate scenarios and synthesize results with comparable ongoing efforts in the Northwoods, Central Hardwoods, and Central Appalachian Regions to provide a comprehensive and spatially explicit assessment of potential change in forest composition, structure, and distribution.

Strategy Goals Implemented: Goal 5, Strategy 5.3, Action 5.3.4.: Develop and use models of climate-impacted physical and biological variables and ecological processes at temporal and spatial scales relevant for conservation.