



USDA Forest Service
Eastern Forest Environmental Threat
Assessment Center



Topic: *ForWarn – Helping Natural Resource Managers Monitor Forest Disturbance*

Background

The *USDA Forest Service Eastern Forest and Western Wildland Environmental Threat Assessment Centers* collaborated with NASA Stennis Space Center and other federal and university partners to develop *ForWarn*, the research component of the USDA Forest Service National Early Warning System. *ForWarn* helps natural resource managers rapidly detect, identify, and respond to unexpected changes in the nation's forests impacted by insects, diseases, wildfires, extreme weather, or other natural or human-caused events.

Using NASA satellite imagery, *ForWarn* provides a near-real-time national overview of potential forest disturbances to direct attention and resources to locations where forest behavior seems unusual or abnormal. *ForWarn* has produced national maps every eight days since January 2010, identifying locations that may require further investigation. The satellite imagery is interpreted and delivered through a suite of products, including the web-based *Forest Change Assessment Viewer*, a tool that provides an 8-day coast-to-coast snapshot of the US landscape and produces geographically relevant maps. *ForWarn* is intended to complement and focus efforts of existing forest monitoring programs and result in time and cost savings.

Additional *ForWarn* partners include the US Geological Survey, Department of Energy, and the University of North Carolina Asheville's National Environmental Modeling and Analysis Center. The nationally recognized *ForWarn* team continues to expand and refine the customizable tools to better assist eastern and western resource managers.

Key Messages

- *ForWarn* and its mapping tool, the *Forest Change Assessment Viewer*, help state, federal, and non-governmental forest and natural resource managers, scientists, and decision makers better identify, understand, and react to environmental disturbances and threats across the nation's landscape.
- *ForWarn* can be used to recognize, track, and compare forest distress due to insects, diseases, wildfires, extreme weather, or other natural or human-caused events to support collaborative projects and result in time and cost savings.
- *ForWarn* benefits Forest Service Research and Development, State and Private Forestry, National Forest System, and other agencies because it nationally tracks potential disturbances in forests, rangeland vegetation, and agricultural crops.

Contact

For additional information and training sessions, please contact Eastern Threat Center *ForWarn* lead researcher Bill Hargrove at (828) 257-4846 or whargrove@fs.fed.us and Eastern Threat Center GIS specialist Bill Christie at (828) 257-4370 or wchristie@fs.fed.us. Please also visit <http://forwarn.forestthreats.org> to learn more and begin using the tool.