



*USDA Forest Service*  
Eastern Forest Environmental Threat  
Assessment Center

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**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](mailto:whargrove@fs.fed.us) and Eastern Threat Center GIS specialist Bill Christie at (828) 257-4370 or [wchristie@fs.fed.us](mailto:wchristie@fs.fed.us). Please also visit <http://forwarn.forestthreats.org> to learn more and begin using the tool.