

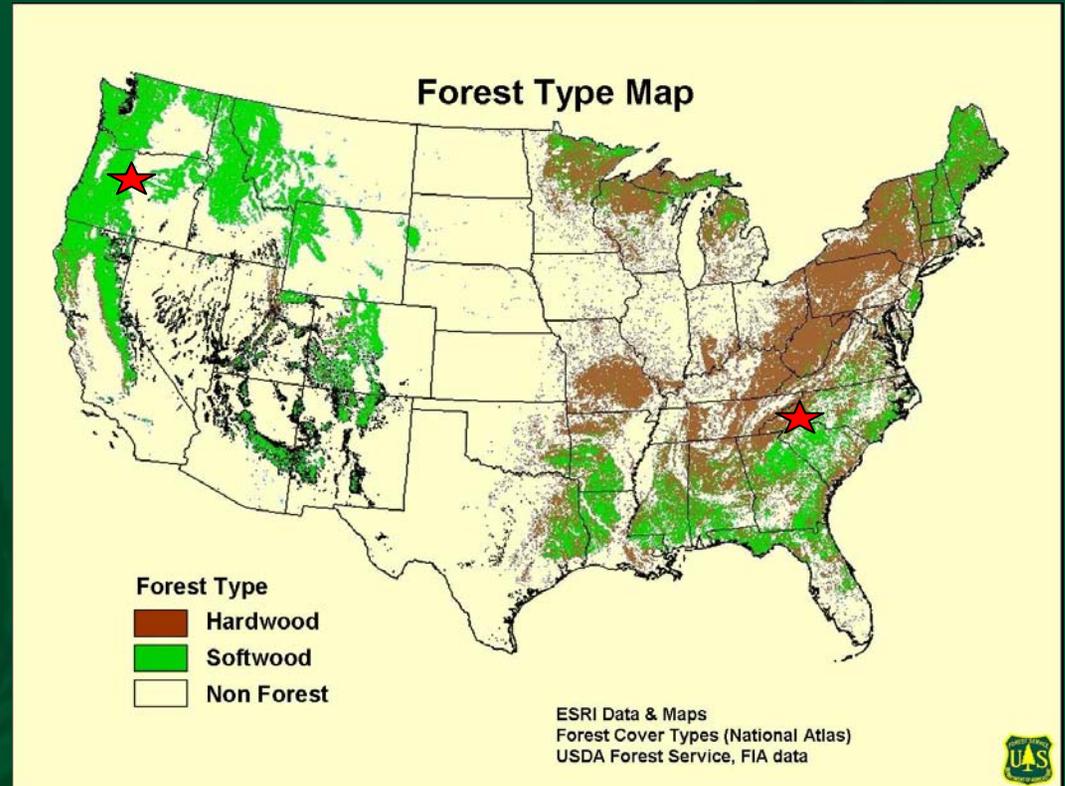
The Western Wildland Environmental Threat Assessment Center

USDA Forest Service
Pacific Northwest Research Station
Prineville, OR

**Climate Change and Forest Health Focus Group
National Forest Health Monitoring Work Group Meeting
San Antonio, Texas, February 13, 2008**

Background

- Two Centers created by Congressional action in 2005
- Jointly funded by 3 FS branches
 - Research and Development
 - National Forest System
 - State and Private Forestry

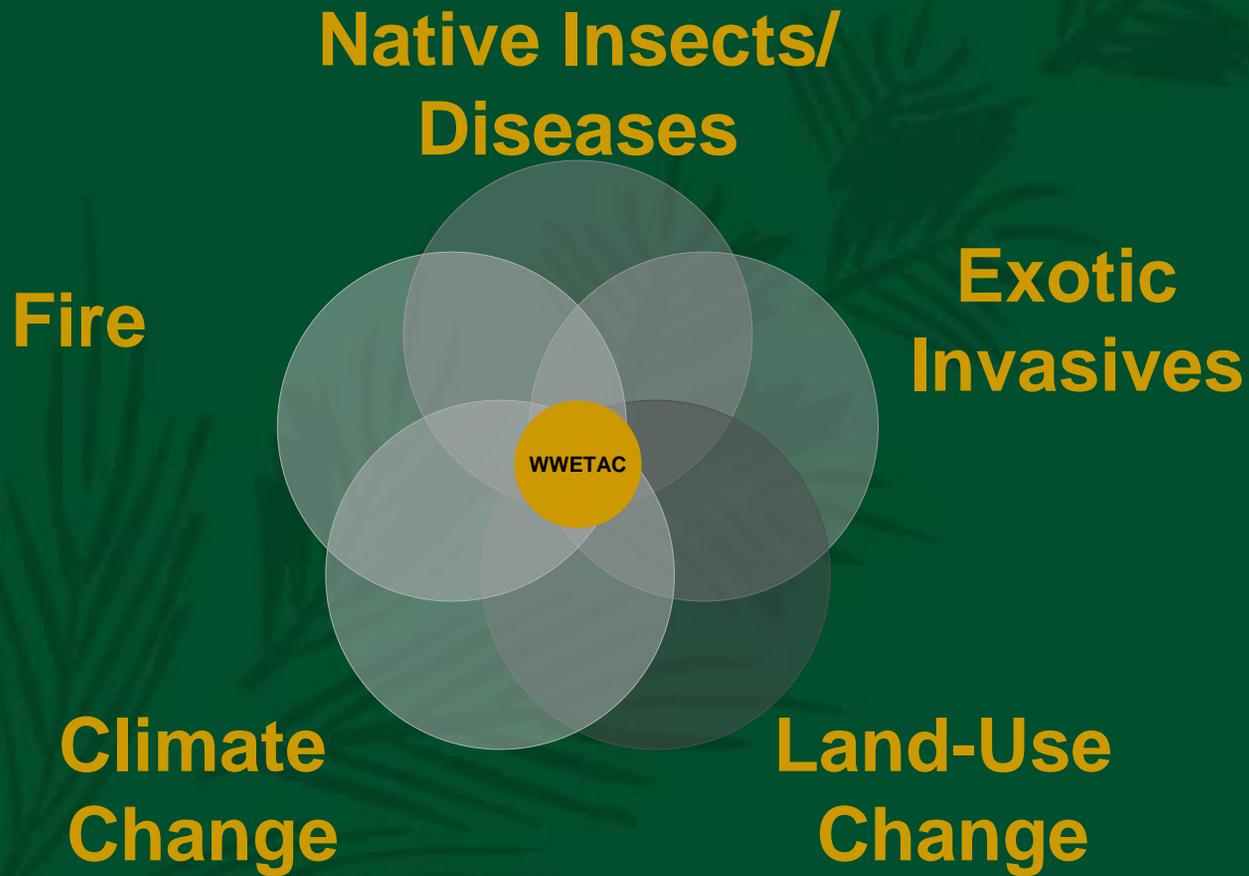




- The mission of the Western Wildland Environmental Threat Assessment Center is to generate, integrate, and apply knowledge to **predict, detect, and assess environmental threats** to public and private forests and grasslands of the west, and to deliver this knowledge to managers in ways that are timely, useful, and user friendly.



Threats to Western Wildlands





Goal

We are specifically interested in climate change synergisms, that is, the integration of climate change with other wildland threats such as insect and disease outbreaks, invasive species, fire, and land-use change across multiple spatial and temporal scales.



Objectives

- Generate and integrate knowledge and information to provide credible prediction, early detection, and quantitative assessment of climate change in the western United States.
- Facilitate development of tools to assess and quantify climate change synergistic effects on natural resources and ecosystem services at scales relevant for forest management and planning.
- To assist with the delivery of climate change and climate change synergism assessment products and tools through a variety of user-friendly technology transfer mechanisms useful to land managers



Program of Work - Themes

- Data and Protocol Development
- Risk Assessment
 - Research and Development
 - Knowledge & Method Development
 - Integration of Multiple Threats
 - Application
 - Model Validation and Improvement
 - Environmental Threat Assessments
 - Rapid Threat Assessments
- Regional West-wide Assessments
- Risk Mapping Tools
- Valuation and Socioeconomic Integration

Climate change program of work



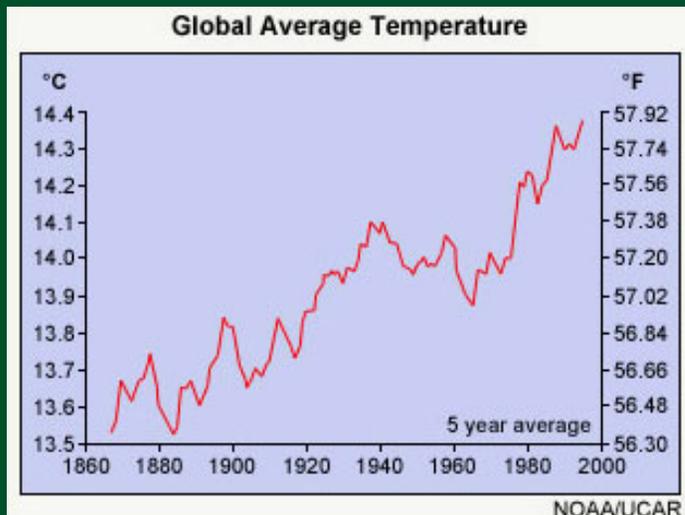
- Coordinate West-wide Climate Change Initiative case study assessments (FY 2008).
- Develop a west-wide climate change initiative workshop (June 2008).
- Represent PNW Station on the Region 6 climate change strategy group.

West-wide Climate Initiative - WCI

- **WCI is a three western research station effort to:**
 - Assess climates at scales relevant to national forest management,
 - Develop tools to quantify effects of climate change on natural resources; and
 - Promote new strategies for national forest planning and management.
- **WWETAC'S Role: facilitate and coordinate portions.**
- **Lead: Becky Kerns**



CC program of work- Workshops



- Synthesize existing knowledge and develop “climate-smart” pest models (June 2007).
- Exploring quantitative approaches for vegetation management and forest planning under a changing climate (January 2008).
- Regional Climate Change 101 workshop (May 2008).
- West-wide climate change initiative workshop, HJ Andrews EF (July 2008).



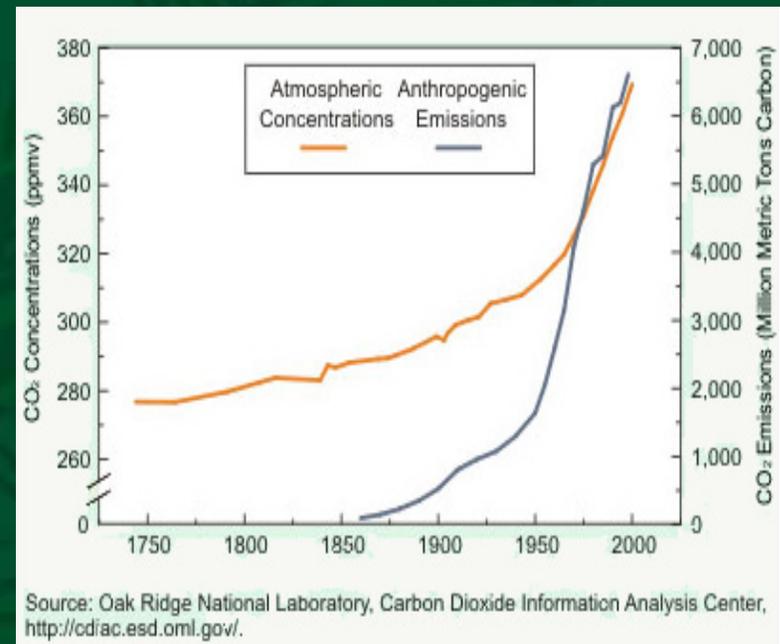
Climate Change and Insect/Disease Interactions

Conduct a highly focused, working workshop with climate change and insect and disease scientists and modelers. Goals:

- Explore and advance the state-of-the science for integrated analysis and risk assessment across multiple spatial and temporal scales.
- Develop a RD&A strategy to advance integrated climate change risk assessments.
- Facilitate development of tools to assess effects on natural resources and ecosystem services at relevant forest management and planning scales.
- Produce a series of rapid threat assessments focused on western wildlands.

CC program of work - Assessments

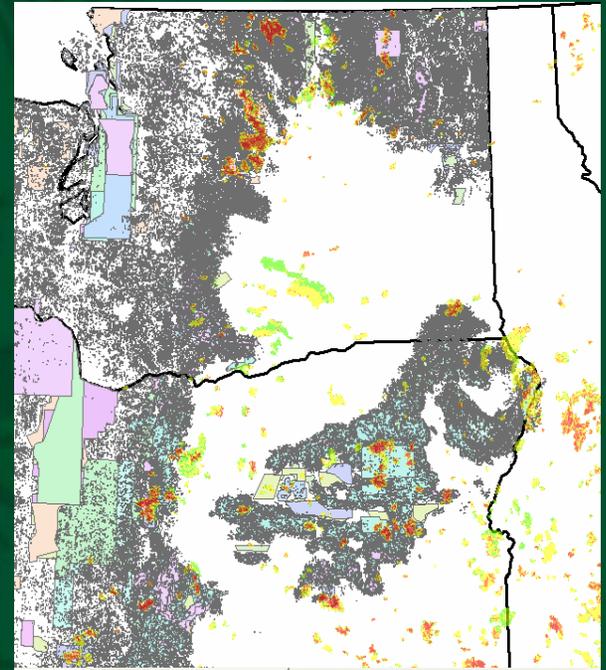
- Conduct a rapid assessment of potential interactions between climate change and tree pathogen dynamics (PSW Station).
- Climate change and bark beetle dynamics in western US (Western Bark Beetle Research Group).





CC program of work - Projects

- Forest Management and Climate change – genetic and silvicultural options for Pacific Northwest (OSU).
- Historic analysis of Wildfire, Insects and Climate Change Interactions (PSW, U Idaho, UC Berkeley).
- National Environmental Threat Assessment Maps - *NETAM* (FHTET, RSCA).
- Climate Change Resource Center website (PNW, PSW, RMRS).





WWW.fs.fed.us/wwetac

The screenshot shows the WWETAC website in a Microsoft Internet Explorer browser window. The browser's address bar displays the URL <http://www.fs.fed.us/wwetac/>. The website header includes the USDA United States Department of Agriculture and US Forest Service logos. The main content area features a navigation menu with links for Home, About, News, Jobs, and Maps. Below the navigation, there are several sections: 'I want to...' with links to learn more about WWETAC, read featured publications, and see maps; 'Information Resources' with links to TreeSearch and Forest Encyclopedia; and 'Research Stations'. The central content area is titled 'Detection and Analysis of Emerging Wildland Threats' and describes the center's mission. A sidebar on the right contains a 'COMING SOON' announcement for the Climate Change Resource Center and a list of 'Threats' including Invasives, Wildfire, Insects, Climate Change, Land Use Change, and Threat Interactions. The browser's taskbar at the bottom shows the Start button, several open applications, and the system clock displaying 9:12 AM.



Questions?

