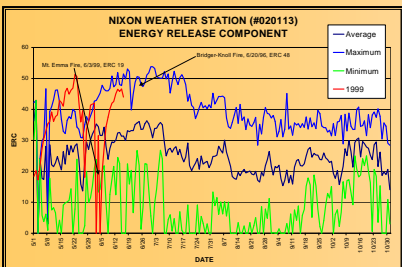


A large wildfire is shown, with thick, billowing white and grey smoke rising from a forest of dark evergreen trees. Bright orange and yellow flames are visible at the base of the trees and along the edges of the smoke plume. The sky is filled with the smoke, and the overall scene is dramatic and intense.

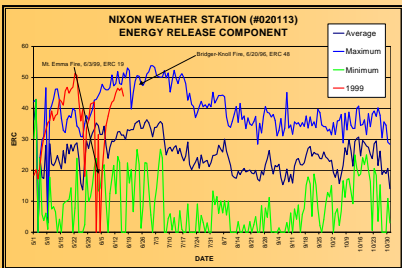
**Forest Service Update:
National Cohesive Wildland Fire
Management Strategy,
USDA Arctic Black Carbon Initiative
And
NWCG Smoke Committee Update**

**Pete Lahm – Forest Service
Fire and Aviation Management**

National Cohesive Wildland Fire Management Strategy



- The Flame Act HR 104 enacted via the Appropriations Act 2010
- Section 503 called for DOI and USDA Forest Service to develop a **National Cohesive Wildland Fire Management Strategy** by 11/1/10
- In addition to the Act, GAO Guidance was:
“The agencies need a cohesive strategy that **identifies the options and associated funding for reducing excess vegetation and responding to fires**. By laying out potential approaches for addressing the growing wildland fire threat, the **estimated costs associated with each approach, and the trade-offs involved**, a cohesive strategy would help Congress and the agencies **make informed decisions about how to invest scarce funds**”.



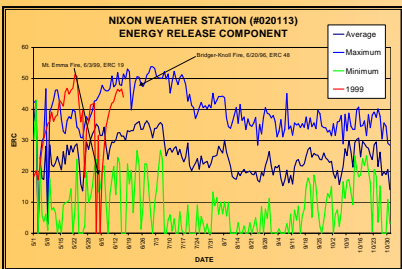
National Cohesive Wildland Fire Management Strategy

- Led by Wildland Fire Leadership Council
- Cohesive Strategy Oversight Committee created to develop the Strategy

24 Representatives or Consulting Reps

- 5 DOI Agency Members*
- 5 USDA FS Members*
- 4 Federal Regional/Area Line Officers
- 3 Other Federal Partners
- 7 State & Local & Tribal & NGO Members
- * Includes Senior Agency Members

National Cohesive Wildland Fire Management Strategy

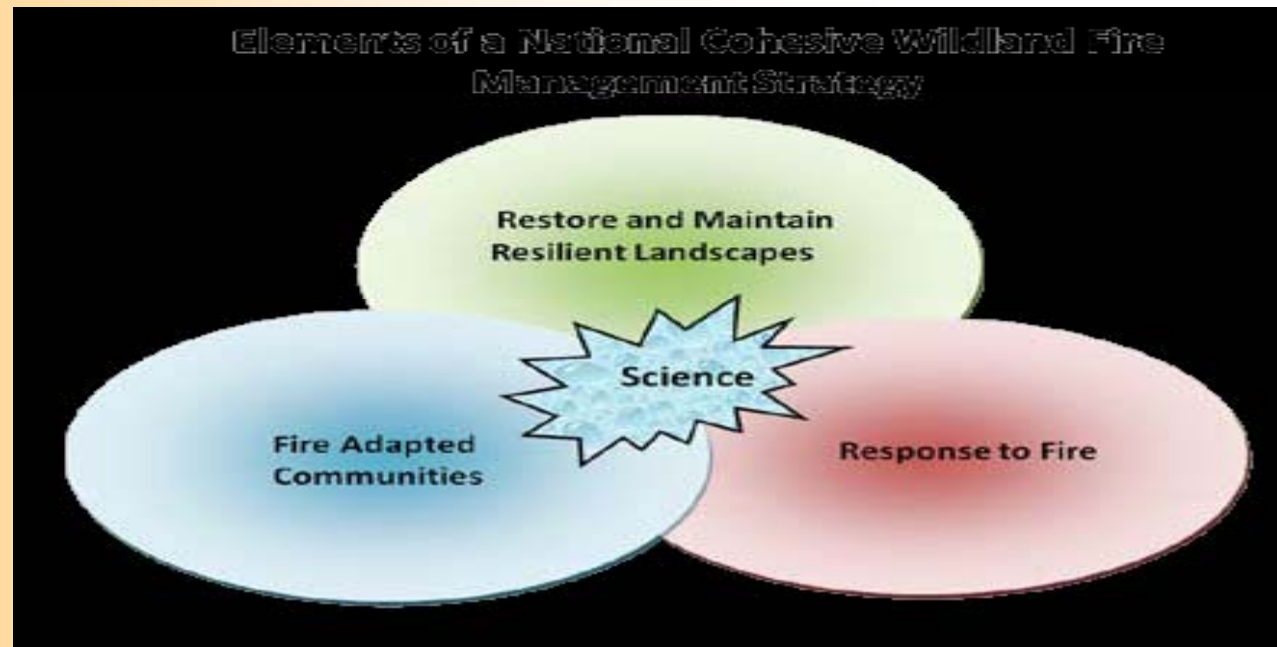
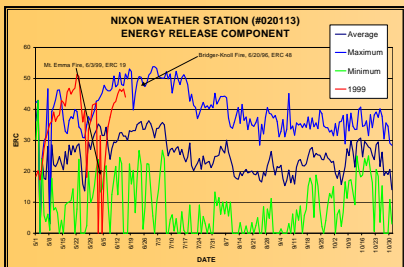


- Strategy based on foundational documents:
 - *1995 Federal Wildland Fire Policy and Program Review,*
 - *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: A 10-Year Strategy,*
 - *Quadrennial Fire Review (2009 & 2005),*
 - *Mutual Expectations for Preparedness and Suppression in the Interface,*
 - *A Call to Action,* and
 - *Wildland Fire Protection and Response in the United States, The Responsibilities, Authorities, and Roles of Federal, State, Local and Tribal Government*

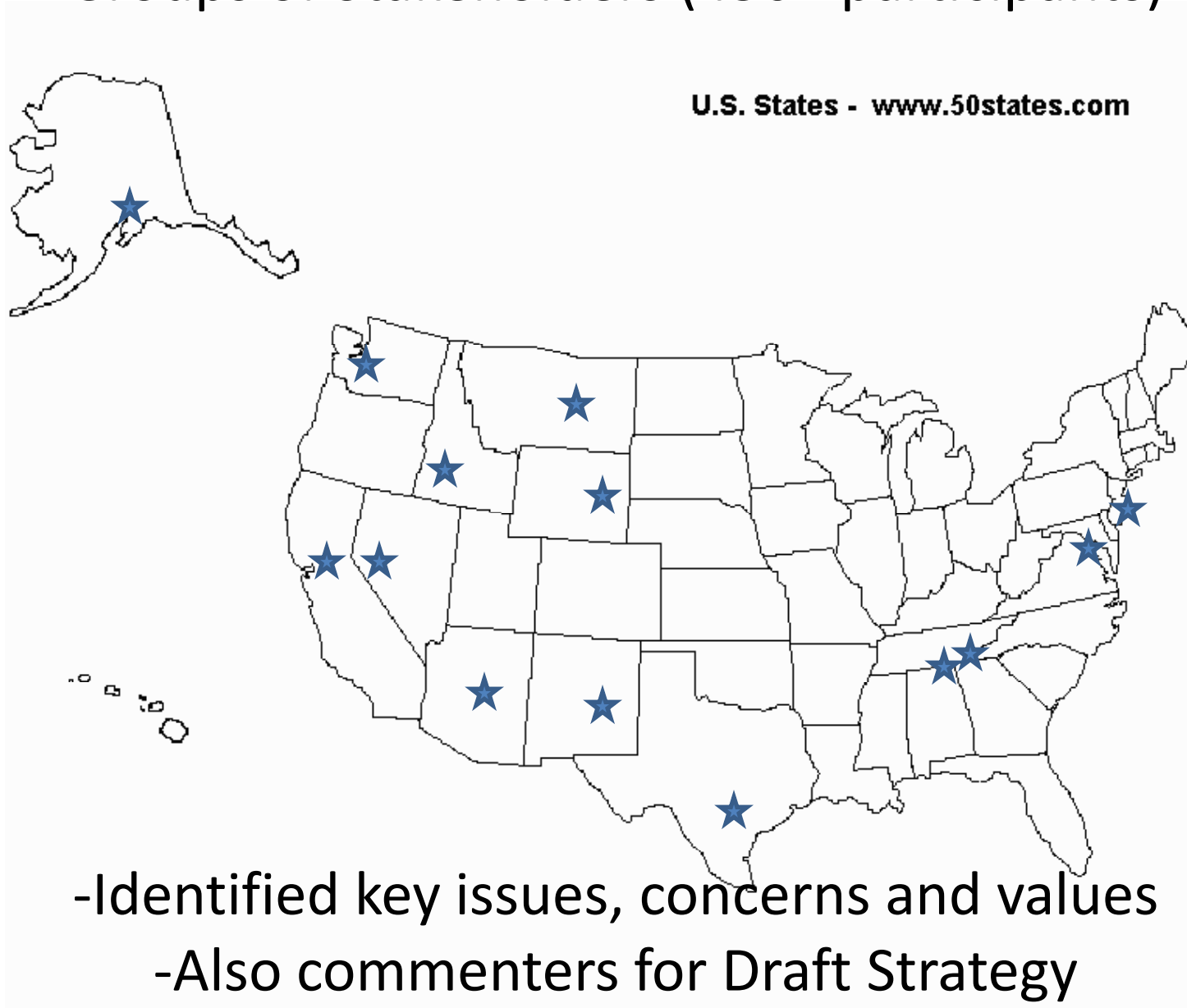
National Cohesive Wildland Fire Management Strategy

Will use science and research findings to address three critical interdependent areas:

- Landscape Restoration and Maintenance
- Response to Fire
- Fire Adapted Human Communities



Regional Forums - “Listening Sessions” with Diverse Groups of Stakeholders (450+ participants)



Work of the CS Science Panel

- **A Comparative Risk Assessment Framework for Wildland Fire Management**
- General Technical Report to be published :
 - Will show a wide range of scientific data, wildfire modeling, and concepts in multi-scale decision support to support the Strategy
 - A **decision support system** to conduct a national tradeoff analysis that is risk based, scalable, and based on regionally-specific values.
 - A **risk based framework** for decision support with application to a wide range of wildfire policy questions, including suppression decisions, change in risk, prioritization, landscape fuel treatment designs, restoration, monitoring, performance metrics, and carbon sequestration.



Cohesive Strategy continued...

The next steps after November 1, 2010 submittal to Congress ...

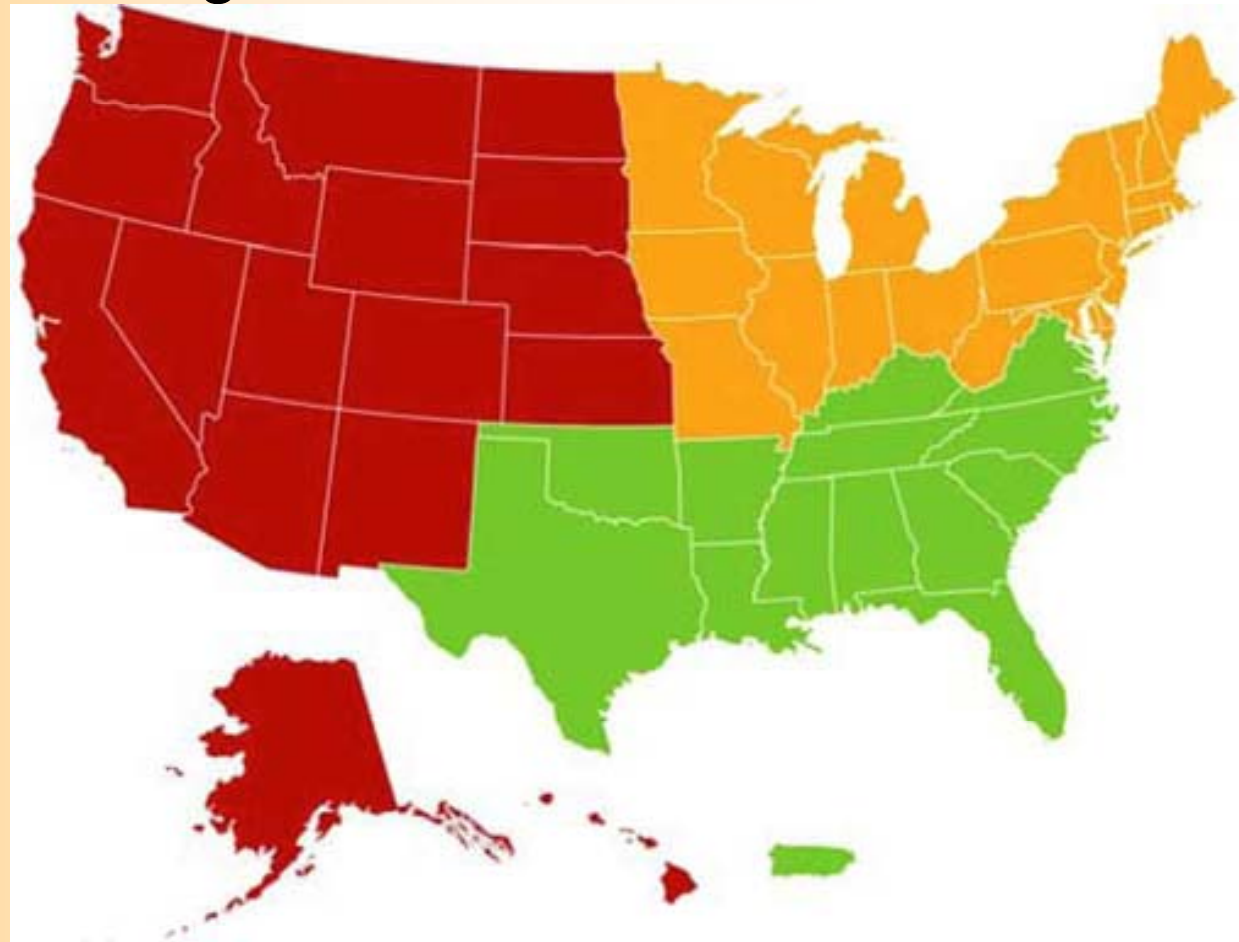
Phase II – Risk Assessment and National Analysis

- Local and Regional assessment and value determination using national scientific structure
- Collaborative (federal, state, tribal, county, local, NGO, land owner, etc.)
- Engagement of partners and stakeholders
- Strategies to minimize risk to regional values (timber, biomass, communities, wildlife, endangered species, water supply, etc.)
- National Framework approach (not top down)

Phase III – Roll up regional information/data into national analysis and implementation with 5 year review cycle

Cohesive Strategy continued...

Phase II Regional Structure:



In Phase II, three regions have been identified by WFLC—South, North and West



USDA Arctic Black Carbon Initiative

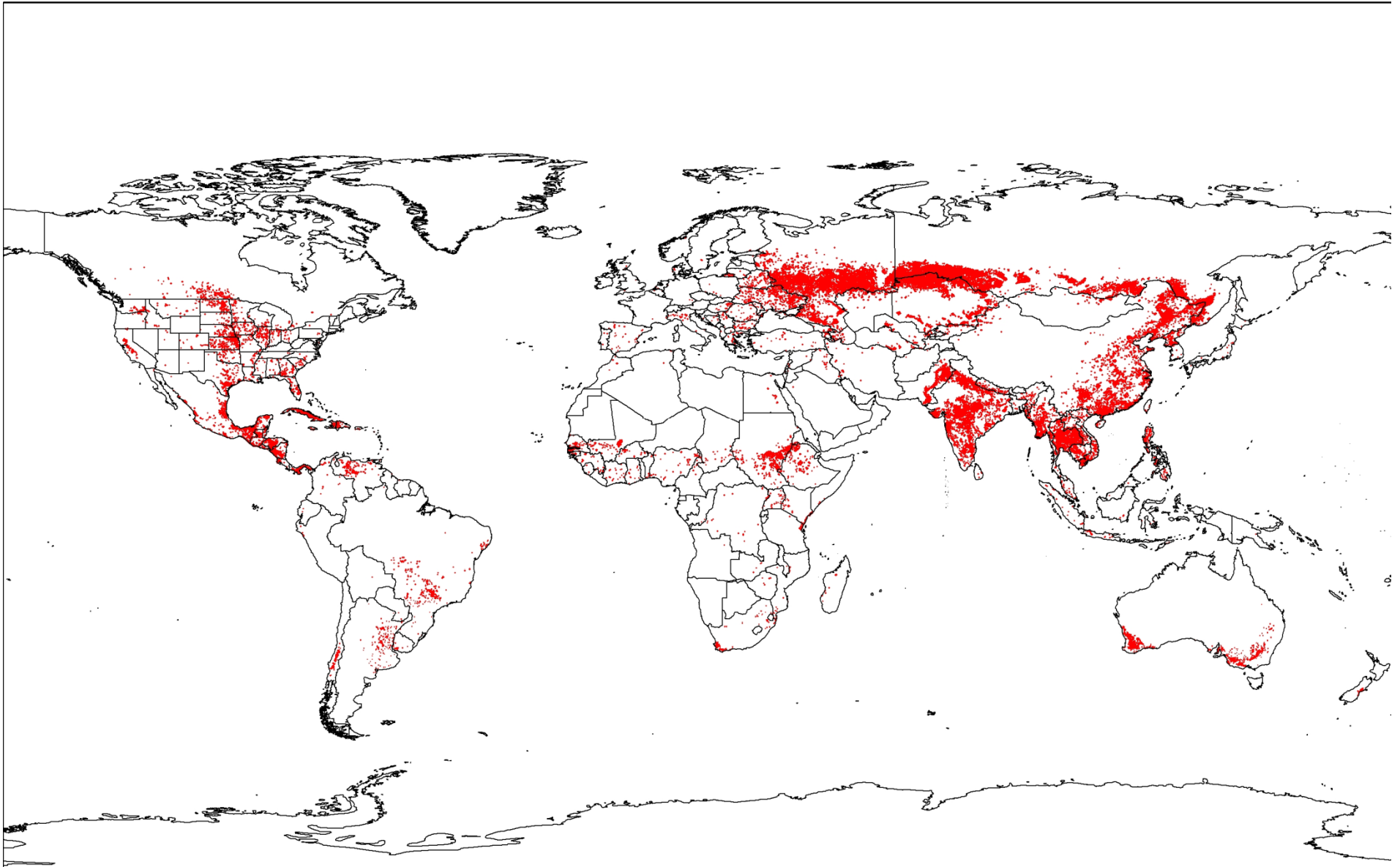
- December 2009, UN Climate Change Conference
- Council on Environmental Quality pledged \$5 million towards international cooperation to reduce black carbon emissions
- Estimates from chemical transport models and satellite observations of fire and smoke plumes indicate burning (agricultural and wildfire) across Eurasia is a significant source of Arctic black carbon
- State Department is administering a two-year multi-agency program for collaborative research and international technical cooperation

2008 Fire Detctions

Provided by UMD Rapid Response Team

Fire detections from the MODIS instruments aboard both the NASA Aqua and Terra satellites.

The fire detections are from the MODIS Data Processing System (MODAPS) Collection 5





USDA Arctic Black Carbon Initiative

USDA is launching a new two-year effort building on existing research efforts centered on North America to better understand the Eurasian burning impacts by:

- 1) developing data and models to improve estimation of black carbon fire emissions and transport;
- 2) increasing science-based knowledge among scientists and practitioners of black carbon emissions from agricultural burning and wildfires;
- 3) facilitating technical cooperation and exchange between US and partner countries (Russia) to improve fire management and agricultural burn management; and
- 4) identifying and promoting feasible options for farmers to reduce black carbon emissions from agricultural burns.



NWCG Smoke Committee (SmoC)



- One of 14 Committees chartered under the National Wildfire Coordinating Group (NWCG)
- Current Members: USFS, NRCS, NPS, FWS, BLM, BIA, NASF, NACAA (Air Regulatory-FL, MN, WA, SJV-CA, WESTAR)
- Provide interagency leadership, coordination and integration of air resource and fire management objectives to support overall land management goals
- Support successful management and utilization of wildland fire while appropriately addressing smoke impacts, to public health, welfare and safety
- Tracks and develops interagency strategies for addressing air quality regulations and the management of smoke from wildland fires addressing criteria pollutants and standards, green house gas emissions and climate change



NWCG Smoke Committee (SmoC)



- Training Subcommittee
 - Online Smoke Management and Air Quality for Land Managers (90 min)
 - Smokepedia - glossary of smoke & air quality terms/acronyms
 - Effective Communication for Smoke Management in a Changing Air Quality Environment – 3-day Workshops
 - <http://www.cnr.uidaho.edu/smoc/>
- Technical Smoke Topics Subcommittee
 - Emission Inventory
 - Smoke Monitoring
 - WFDSS Air Quality Portal-wildland fire impact assessment
- Smoke Managers Subcommittee
 - Forum of operational smoke managers, forecasters and modelers to share technical, administrative, and organizational information.



National Smoke Management Resources Website

<http://www.nifc.gov/smoke>

SmoC public website
(SmoC Updates, Emerging Smoke Issues, News,
Announcements, NAAQS Maps, etc.)

My Fire Community website,
“Air Quality and Fire Issues” Neighborhood
www.myfirecommunity.net “Air
Quality and Fire Issues”

September 2010

USDA Arctic Black Carbon Initiative

Background: In December 2009, within the framework of the UN Climate Change Conference, the White House Council on Environmental Quality announced the Administration's commitment of \$5 million towards international cooperation to reduce black carbon emissions and the associated warming effects in and around the Arctic. Black carbon is a short-lived warming agent that is particularly damaging to the Arctic by darkening ice and hastening melting. Decreasing black carbon emissions is a strategy to mitigate near-term warming in the Arctic. The U.S. initiative to address black carbon emissions, supported by the U.S. State Department, will build on the ongoing analysis of the Arctic Council Task Force on Short Lived Climate Forcers and other domestic and international assessments. Multiple concurrent projects are being initiated to address the most significant contributors of black carbon emissions that reach the Arctic, including diesel engines, agricultural burning and forest fires, and stationary sources such as district heating and heavy industrial facilities in high northern latitudes.

New USDA Program: Chemical analysis of particles deposited on Arctic snow suggests that biomass burning, including agricultural burning and forest fires, is the main source of black carbon deposition in the Arctic. According to estimates from chemical transport models and satellite observations of fire and smoke plumes, international experts believe burning across Eurasia is a significant source of Arctic black carbon. In an effort to mitigate black carbon emissions from biomass burning, the U.S. Department of Agriculture (USDA) is poised to launch a new two-year multi-agency program for collaborative research and international technical cooperation to achieve the following goals: 1) develop data and models to improve estimation of black carbon emissions and transport; 2) increase science-based knowledge among scientists and practitioners of black carbon emissions from agricultural burning and forest fires; 3) facilitate technical cooperation and exchange between US and partner countries to improve fire management and regulation of agricultural burning; and 4) identify and promote feasible options for farmers to reduce black carbon emissions from agricultural burning. This USDA program will focus on US collaboration with Russia to jointly address these Arctic black carbon objectives through research, technical exchanges and other cooperative activities.

USDA Research Activities: The U.S. Forest Service and Agricultural Research Service are leading USDA research efforts on black carbon emissions from fires. Through the new Arctic Black Carbon Initiative, USDA scientists will seek to improve estimation of emissions and transport of black carbon from agricultural burning and forest fires by quantifying spatial and temporal patterns of these emissions in Eurasia and conducting an assessment of long-range transport of black carbon from fires in Russia and adjoining regions to the Arctic. The research will identify meteorological conditions and potential source locations for Arctic transport of smoke and analyze agronomic practices in Eurasia to identify opportunities for reduced use of agricultural burning.

USDA Technical Exchange and Other Cooperative Activities: Through the new Arctic Black Carbon Initiative, the U.S. Forest Service and Foreign Agricultural Service will implement technical exchanges and cooperation between U.S. and Russian experts on black carbon, agricultural burning, and fire management. These efforts will support training activities and the development and implementation of innovative local-level "pilot" programs designed to illustrate strategies and practices that could be more broadly applied to reduce any negative environmental impact of agricultural and forest fires. Key issues include interagency cooperation on fire management, fire budgets, and GIS and remote sensing. USDA will also facilitate public-private partnerships to develop local-level fire wardens and fire brigades in Russia and outreach to farmers in Russia to increase awareness of approaches to reduce black carbon emissions from agricultural burning.

Contacts: For additional information, please contact: Brad Kinder (bkinder@fs.fed.us, 202-501-2602) or Lara Peterson (lkpeterson@fs.fed.us, 202-273-4724), US Forest Service International Programs.

