



United States Department of Agriculture

Office of Sustainability & Climate Change



Forest Service



United States Department of Agriculture

Forest Service Mission

The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.



Forest Service



United States Department of Agriculture

Office of Sustainability & Climate Change

Guide the Agency in developing policies and practices to ensure the Nation's forests and grasslands will meet the needs of present and future generations under a changing climate.



Forest Service



Unit

Director, Sustainability and Climate Change

Cynthia West
Washington, DC

Administrative Assistant

Wilma Fant
Washington, DC

Deputy Director (Resources)
Dixie Porter

Program Specialist (Network)
GS-301/401-12/13/14

Program Analyst (Data/Reporting)
GS-343-13/14

Deputy Director (Operations)
Anna Jones-Crabtree

Program Specialist (Programmatic Focus- Resources)
GS-301/401-12/13/14

Program Analyst (Budget/Workplan)
Sarah Kuiken

Program Analyst (Education)
GS-1305-11/12/13

Program Specialist (Programmatic Focus- Operations)
GS-301/401-12/13/14

Program Specialist Field Focus Resources
Pathways – Karen
Dante

Program Specialist (Field Focus- Operations)
GS-301/401-12/13/14

rice



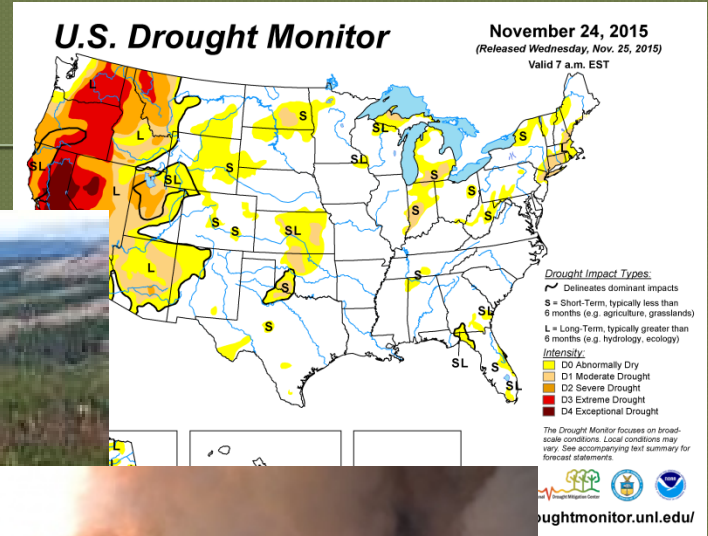
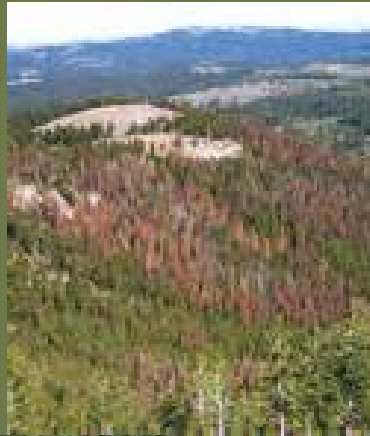
United States Department of Agriculture

Climate change challenge



Forest Service

Disturbance



Forest Service

Forests are carbon sinks



Carbon Sequestration of by U.S. Forests

- Forest offset estimated 14-15% of U.S. annual emission of GHGs
- Federally owned forests make up 20% of all forests in the U.S.
- Federal forests capture about 25% of annual GHG emissions





United States Department of Agriculture

Forest Service Carbon Principles



Forest Service



United States Department of Agriculture

Carbon Principles

Land management actions can be designed to sequester carbon while meeting other resource management objectives. The FS recognizes and promotes the fact that forests are important in sequestering (capturing and storing) carbon and that management of these lands can contribute to mitigating climate change.



Forest Service



Carbon Principle #1

Emphasize ecosystem function and resilience. (Function First). Carbon sequestration capacity depends on sustaining and enhancing ecosystem function to maintain resilient forests adapted to changing climate and other conditions. Carbon policies should be integrated with existing policy frameworks for sustainable forests because **management activity and changes in forest and grassland condition have at least some impact on the forest carbon condition**





Carbon Principle #2

Recognize carbon sequestration as one of many ecosystem services. (One of Many Services).

Carbon sequestration is one of many ecosystem services and benefits provided by forests and grasslands, and wood products, now and in the future. **Carbon sequestration should be considered in context with other ecosystem services.**





Carbon Principle #3

Support diversity of approaches in carbon exchange and markets. (Diverse Markets). Recognize that decisions about carbon in America's forests are influenced by ownership goals, policy, ecology, geography, socioeconomic concerns, and other factors that vary widely. The FS supports a variety of approaches to payments and exchange for carbon sequestration to **provide choices that are compatible with the objectives of different owners.**



Carbon Principle #4

Consider system dynamics and scale in decision making. (Scale and Timeframe). Evaluate carbon sequestration and cycling at landscape scales over long time frames. **Explicitly consider uncertainties** and assumptions in evaluating carbon sequestration consequences of forest and grassland management options.



Carbon Principle #5

Use the best information and methods to make decisions about carbon management. (Decision Quality). Base forest management and policy decisions on the best available science-based knowledge and information about system response and carbon cycling in forests, grasslands, and wood products. **Use this information wisely by dealing directly with uncertainties, risks, opportunities, and tradeoffs** through sound and transparent risk management practices





Carbon Principle #6

Strive for program integration and balance. (Program Alignment) Carbon management is part of a balanced and comprehensive program of sustainable forest management and climate change response. As such, forest carbon strategies have ecological, economic, and social implications and interactions with other FS programs and strategies such as those for energy and water.





United States Department of Agriculture

USDA Mitigation Building Blocks



Federal Forests

Private Forests

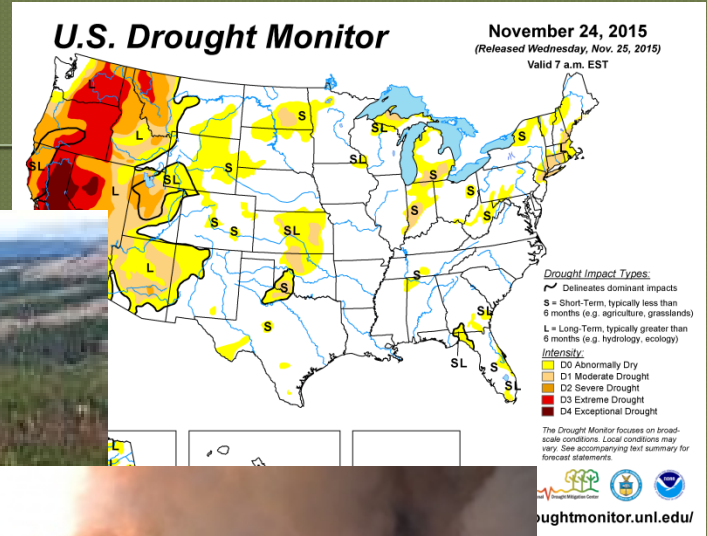
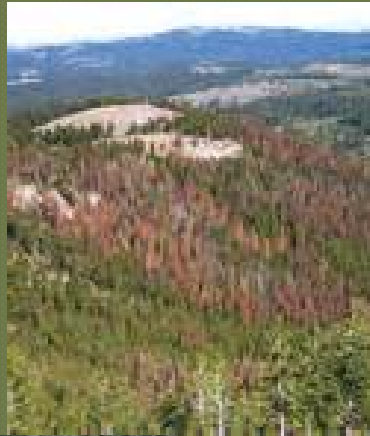
Urban Forests



Wood Products



Disturbance



Forest Service



United States Department of Agriculture

Forest Drought

USDA
United States Department of Agriculture

Effects of Drought on Forests and Rangelands in the United States: A Comprehensive Science Synthesis



Forest Service Gen. Tech. Report WO-93b January 2016



Forest Service





United States Department of Agriculture

Manage Infrastructure



Forest Service



United States Department of Agriculture

Resiliency to disturbance



Forest Service



Climate Change Performance Scorecard

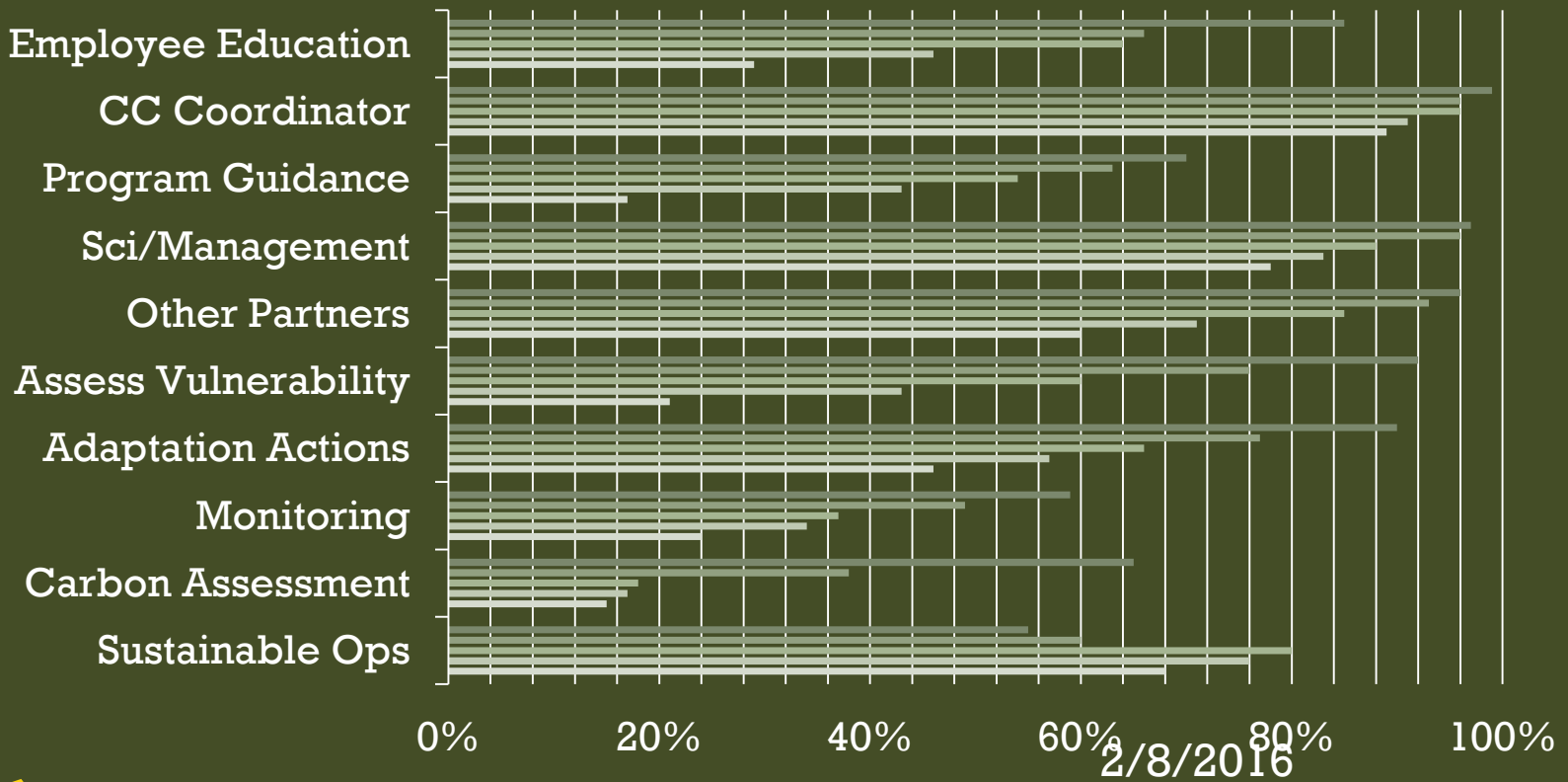
<u>Dimension</u>	<u>Element</u>
I. Organizational Capacity	1. Employee Education
	2. Designated Climate Change Coordinators
	3. Program Guidance
II. Engagement	4. Science and Management Partnerships
	5. Other Partnerships
III. Adaptation	6. Assessing Vulnerability
	7. Adaptation Actions
	8. Monitoring
IV. Mitigation & Sustainable Consumption	9. Carbon Assessment and Stewardship
	10. Sustainable Operations





“Yes” Responses by Element

■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011





United States Department of Agriculture

Feedback Received on Scorecard 1.0

Successes:

Generates awareness of climate change-related stressors and adaptation strategies

Supports Roadmap implementation

Highlights needs for new policy, research, and technical tools

Helps networks define and prioritize programs of work

Establishes a means for tracking and reporting the agency's performance in responding to climate change



Forest Service





United States Department of Agriculture

Feedback Received on Scorecard 1.0

Shortcomings:

Applies only to National Forest System management units

Tracks actions, not outcomes

Insufficient staff/funding for unit-level implementation

Varying degrees of line officer buy-in and accountability

Inconsistent interpretation of "Getting to Yes" guidance

Redundancy between Elements

Low bar for some Elements



Forest Service





United States Department of Agriculture

Beyond Scorecard

Goal: Move beyond capacity-building to ensure on-the-ground implementation of climate-informed resource management decisions across all units and programs



Forest Service

Grand challenges & opportunities

- #1 Communicating information:** make information and tools easy to find and use
- #2 Improving the network:** strengthening and broadening our networks to enhance information exchange and improve problem solving
- #3 Analyzing and sharing data:** to improve processes and decisions





Grand challenges & opportunities

- #4** **Bringing expertise to decisions:** participating across programs in developing national guidance and programs to ensure they are climate smart and have a positive cost/benefit

