



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

December 5, 2014—11:00 a.m. (ET)



FFACCTs Highlights – Opening remarks by Steve McNulty, Research Ecologist and Team Leader, Eastern Threat Center

Washington Office (Research and Development) Update

Karen Dante, Climate Change Fellow, Climate Change Advisor's Office (CCAO)

- USDA Climate Change Mitigation Strategy effort: Ask USDA for all agencies to develop a set of potential policies and measures that will reduce greenhouse gas (GHG) emissions and increase carbon sequestration within the agriculture and forestry sectors. Forest Service is responsible for leading the following “building blocks” – private forest growth and retention; stewardship of federal forests; promotion of wood products; urban forests; and grazing and pasture lands. Recommendations will be presented to Secretary Vilsack in early January followed by refined GHG estimates in early Spring.
- A word about merger of the climate advisor's office and the sustainability group; all of the positions will stay as is and to have a stronger presence in the Washington office, the five people under the Climate Change Advisor will be joined by seven from the sustainable operations office. It is anticipated someone will take place of Dave Cleaves after his retirement as Climate Change Advisor to the Chief though it has not yet been announced who that will be. Focus groups, webinars and sessions to present the new team to the folks in the field and in the Washington office have been held and we are currently collecting feedback on operations and needs to guide the new office. There will be more details within a few weeks.
- R9 question from Tony – is this merger coming out with the mitigation strategy? The Climate change Office is leading the effort following a request from the Secretary asking all agencies to refine GHG estimates. Different people are collecting estimates from all agencies, more from a policy perspective and at the national/WO level around the building blocks. Refining the estimates and getting regional projections should begin to take place within a 4-6 month timeframe.

USDA Climate Hubs Update

Rachel Steele, National Hub Coordinator, USDA Office of the Chief Economist

- Office is supporting the Climate Change Mitigation Strategy effort Karen just talked about.
- The Climate Hubs at present are concentrating on regional vulnerability assessments and evaluating existing tools.
- The website is getting a lot of hits -- it is coming along nicely, thank you everyone for your support.

Northeast Climate Science Center (NECSC) Update

Northeast Climate Science Center Stakeholder Advisory Committee taking place; no update for December.

Southeast Climate Science Center (SECSC) Update

Cari S Furiness, NC State University, SECSC/Global Change Forum

- FY15 selection of projects is in progress. The announcement of selections will come this week and then be public soon thereafter.
- Tribal engagement – Aranzazu Lascrain, Coordinator made a presentation at the United South and Eastern Tribes natural resources committee about climate readiness activities in a lead up to the USET 2014 Annual Meeting & Expo. We are developing plans for future tribal engagement.
- Tool rollout – global change monitoring portal. Catalog of systems with a centralized catalog of observational networks to contain climate relevant measurements associated with aquatic and terrestrial ecosystems in the southeastern United States. The SECSC is actively populating the database and user interface. It has a simple URL: [//my.usgs.gov/gcmp/](http://my.usgs.gov/gcmp/).
- As part of a science festival next week, the Global Change Fellows will have a video workshop and their presentations will be available. The videos are on Fellows' current research topics prepared with experienced guidance to help Fellows develop communications skills behind and in front of the camera.



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

December 5, 2014—11:00 a.m. (ET)



Station Updates

Kier Klepzig, Assistant Director, Southern Research Station (SRS)

SRS is working with partners on monitoring and assessment implementation for the Forest Planning process. Climate change is part of the forest planning process for managing resources. There is an effort to look at inventory assessment from a landscape and an all lands approach. Jamie Barber is the lead and Michele Tames can orientate you on how you can be involved in devising a strategy for inventory monitoring assessment and the impact of climate change on those types of activities. They are the contact people for this effort. Jim Vose (Project leader, Center for Integrated Forest Science) is another person engaged in assessment activities.

National Assessment of the Impacts of Drought on Forests and Rangelands Many areas of the U.S. are currently experiencing significant droughts. While much attention is focused on the impacts of drought on agricultural lands, forests and rangelands are also impacted by drought, sometimes severely. As drought regimes change, there is an urgent need to synthesize scientific information on the impacts of drought on forests and rangelands in order to predict impacts and manage for resiliency and adaptation.

To address this need, the USDA Forest Service is leading a “National Assessment of the Impacts of Drought on Forests and Rangelands” (NAIDFR). This information is critical for the recently re-authorized National Integrated Drought Information System and will also meet the National Climate Assessment (NCA) need for scientific information on drought. The effort is being led by USDA Forest Service R&D scientists in partnership with Duke University. Work on the NAIDFR includes participation from over 50 scientists from the Forest Service, other federal agencies, research institutes, and universities across the U.S.

Key Points:

- NAIDFR topics were identified using a series of virtual workshops involving scientists and stakeholders.
- Focal areas include drought characterization; drought impacts on forest processes and disturbances such as insect outbreaks and wildfire; and consequences for forest values.
- Although the NAIDFR has a national scope, it will identify and discuss regional concerns such as large scale insect outbreaks and wildfire risk in the western U.S.
- The assessment is subdivided into 12 comprehensive chapters using an approach that closely follows the Intergovernmental Panel on Climate Change (IPCC) process with convening authors, lead chapter authors, and contributing authors.
- Co-convening authors are Jim Vose, Charlie Luce, and Toral Patel Weynand with Forest Service R&D; and Jim Clark with Duke University.
- Work on the NAIDFR is underway with an expectation of a peer-reviewed report being available in summer 2015.

Question regarding monitoring -- around climate change and other services on the tribal lands and the cultural impact that may have on botanicals/valued species?

The all lands approach effort, which is part of the implementation strategy, is meant to address these kinds of monitoring issues. One way that of attempting to do this is through the establishment of pilot projects – likely one per region. The assessment is in the early stages

Rich Birdsey, Program Manager, Strategic Foresight and Rapid Response Group, Northern Research Station (NRS)

- Lindsey Rustad’s “Smart Forest” effort to instrument and network NRS Experimental Forests was featured in Tuesdays NYTimes for their new urban installation in the Alley Pond Park in Queens New York.
- Coeli Hoover has been working with others to develop PRESTO, a web-based tool that allows users to estimate the carbon stored in harvested wood products. Users may enter stand specific harvest data or experiment with lump sum data entry, and output is available in several forms. A free account is needed to use the tool; instructions and website address are included in the User Guide, available at: <http://www.treesearch.fs.fed.us/pubs/47240>.
- NRS ADs Schmidt, Brissette, and Tran toured the SPRUCE peat warming and elevated CO2 experiment at the Marcell Experimental Forest. The new chamber design is a mansion compared to the former shed of acid rain days. It is really



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

December 5, 2014—11:00 a.m. (ET)



incredible, beautifully controlled, and has ability to warm the entire ecosystem above and below ground. Rich suggested a FFACCT update on the SPRUCE project (first presented as September 2010 FFACCT).

- Visit to the Oak Ridge lab to discuss new group being formed: NEED? – national extreme events (with EFETAC Hargrove and Christie, Birdsey and Steve (NRS) et al.). Aim to improve prediction and response to extreme events in the future and enhance the research on the impact on extreme events over time on the forest ecosystem.

Brief discussion on what is extreme event? The initial thought was focus on things like hurricanes and tornadoes but there are some that occur more slowly, like a drought. In one respect, in the climate hubs, the interaction between agriculture and forest definitely has some reason to be studied even if we focused on the forest. Drought in the agricultural system has huge impact in the short term; water relations and other factors come into play. If the focus is on the forest there is certainly very significant short term, annual and even seasonal impacts.

National Forest System Updates

Stephen Handler, R9/Northern Institute of Applied Climate Science-Eastern Region

Region 9 –

- Leslie Brandt and a core group of monitoring coordinators from R9 units are working on a monitoring workbook to help units identify monitoring items that are linked to climate change. This workbook will be modeled on the NIACS Adaptation Workbook.

NIACS –

- Leslie Brandt organized a workshop in Chicago, assisted by Chris Swanston, to bring researchers and managers together for an urban forest vulnerability climate change assessment. They are using Chicago as a pilot metropolitan area to look at vulnerability of an urban system to climate change.
- Chris Swanston was invited to Ontario for a meeting of the Ministry of Natural Resources and Forestry, talking about lessons learned in climate adaptation from the Climate Change Response Framework.
- Patricia Butler worked with the Monongahela NF to help incorporate climate change considerations on their Big Rock project vegetation management. It is one of the larger scale demonstration sites being established across the Eastern Region.
- Chris and Maria Janowiak will be in Connecticut next week to co-host a climate change adaptation training for forest managers with the Wildlife Conservation Society.

Question in regard to the first point the monitoring network; is that a regional effort? Or would that be a larger scale effort? Just Region 9 or Eastern region?

Right now it is something that Leslie is brainstorming with a couple of coordinators from the forests in Region 9. It has not been put out to all of the forests in the region, but that is the plan to help them identify the monitoring metrics that may be linked to climate change.

David Meriwether, Ecosystems Management Coordinator, Southern Region

- We are deep in the work of Planning Rule implementation, which is the spearhead for climate change implementation in R8. We have three plan revisions that are being drafted by ID teams on each forest (Nantahala-Pisgah, Francis Marion, and El Yunque). Along with the SRS, EFETAC and IITF staffs, we are and will be involved in supporting their effective incorporation of climate change into their draft plans that should be coming in the first few months of the new calendar year.
- Planners on the Francis Marion and Nantahala-Pisgah have an audience with the Planning Rule FACA Committee this month to connect with them on climate change work they are doing in their plan revisions.
- Regionally, we are also developing our process and guidance for forests on monitoring plans for all our forests to build in new planning rule requirements, including climate change monitoring. That process and guidance will be completed very soon. December is also a short month, but we are working hard to get these ready.
- Our scorecard evaluation and coordination will continue for the next several months as we engage our forest climate change coordinators in detailed meetings on the scorecard elements 7, 8 and 9. Much around restoration and implications for resilience. Some specific actions in relation to Climate Change and other threats.



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

December 5, 2014—11:00 a.m. (ET)



Comment; climate change risk assessment being developed for SE hub --What David mentioned is the contribution that both Southern Research Station and Region 8 in conjunction put together for the assessment document that is currently being drafted. David and Kier are both working on this with input from others as well.

Presentation

"GOT TREES? Building Climate-Ready Agriculture" -- **Michele M Schoeneberger – USFS NAC R&D Program Lead & Soil Scientist, USDA National Agroforestry Center**

Comment: the presentation will be up on the website so folks wanting information about the topic can access it in the FFACCTs archives.

Question: Farmers historically grazed cattle into woodlots. We were shown pictures of roots and dying trees it was really discouraging when I was going through school back in the 1990s. We were told that was the worst thing that you could ever do. The question I have, is it a matter of the right place and the right time? The Southeast in particular is a great place to do this type of forestry. Are some ecosystems better adapted?

Agroforestry is intentional and deliberate. Managing the actual grazing itself is one of those components. So I think depending on the livestock, the forest type, the age, management-rotation, stocking levels --and on the objectives, you determine whether you have a productive sustainable and profitable operation. All of those things you described do not necessarily constitute Silvopasture.

Maybe there was too much visitation to establish the growth of the grass below.

That is very much so. You have the growth underneath, having the guidelines to obtain the amount of shade or sunlight to maintain the forage and provide the benefits of the shade which includes extending duration of the growth. That is the other part that sells the possibility to the land manager.

Difference between silvopasture and forest grazing – intentional management to prevent degradation. The canopy is manipulated to control shade and forage availability/growth.

Round Robin Discussion and Q&A

Happy World Soil Day!

There will be no FFACCT in January 2015.

The next FFACCTs will take place *February 6, 2015*. See <http://www.forestthreats.org/news/upcoming-events/ffaccts> for details.

Please send comments, feedback, and presentation suggestions to Stephanie Worley Firley, Eastern Threat Center, (sworleyfirley@fs.fed.us) and visit the [FFACCTs webpage](#) for additional information.