



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

April 3, 2015—11:00 a.m. (ET)



FFACCTs Highlights – Opening remarks by Steve McNulty, Director, USDA South East Regional Climate Hub (SERCH)

Washington Office (Research and Development) Update

There were no updates for today.

USDA Climate Hubs Update

Rachel Steele, Office of the Chief Economist, USDA Climate Hubs

- The Midwest and Northern Forests regional vulnerability assessment was published on March 24th. This vulnerability assessment provides their stakeholders with an introduction to the region, regional climate sensitivities and adaptation strategies for working lands, a greenhouse gas emissions profile with mitigation opportunities, and an overview of how partner USDA agencies are being affected by a changing climate
- The USDA Climate Hubs Strategic Plan was approved by the Executive Committee and is published on the Hubs website. The Strategic Plan identifies seven activities/products associated with accomplishing the mission of the Hubs: 1) partnerships/coordination, 2) research communication, 3) information synthesis and tool development, 4) assessments, 5) education, 6) communication and delivery strategy, and 7) adaptation and mitigation demonstrations.
- The Southwest Hub created temperature and precipitation change maps at the county level for the entire US – and projected change in the mid-century – based upon the MACA dataset. This resource is being shared with the other hubs and sub-hubs.

Northeast Climate Science Center (NECSC) Update

Toni Lyn Morelli, Program Manager, Northeast Climate Science Center

- In addition to continuing to work with the northeastern and midwestern states on a climate change synthesis document for their State Wildlife Action Plans (SWAPs), researchers affiliated with the NECSC are working with the state of Massachusetts to aid science-based climate adaptation through the use of a web-based tool that could potentially be used as a model for other states. Stay tuned for more information as the project develops.
- The NE CSC is also holding its annual internal science meeting, bringing together PIs from across the network, and starting to plan for a potential regional science meeting in 2016. Again, stay tuned!

Southeast Climate Science Center (SECS) Update

Jerry McMahan, DOI, Director, Southeast Climate Science Center

- Main activity is project level work and finalizing fy15 communication with the PIs.
- SE Hub and SECS held combined meeting over objectives for joint staff activities; project scale connections – refuge and National Forest work in South Carolina; broader shared needs to foster cross state goals to fill niches not currently set with states; there will be pilots for network analysis around shared interests, e.g. conservation and production issues, to see where influences lie. This will allow more focused activities by partners.

Station Updates

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

- The Southeast Regional Climate Hub, SERCH, in collaboration with the other Regional Climate Hubs, has been hard at work developing an online [Tools Database](#), making decision support tools readily available to those in



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

April 3, 2015—11:00 a.m. (ET)



the land management community. The final release is scheduled for July, but we are currently seeking Beta testers (time commitment less than 30 minutes) to help us improve the site before that date. The Beta testing period is March 20-May 29. To learn more about the site, or if you are interested in being one of our Beta testers, please email Sarah Wiener (sswiener@ncsu.edu) for more information.

- SERCH LIGHTS, launched in April, is an [alert subscription](#) product that matches information for the Southeast to subscriber selected locations and sector(s) on a monthly basis; subscribers receive an alert if conditions are forecast to change for their area in the current month. The first alert focuses on drought.
- Using the assessment tool [ForWarn](#), SRS researchers recently developed maps showing how growth and development of vegetation signals winter's end and the new growing season across all lands. Three maps detailing greenup in forests and grasslands, agricultural lands, and urban areas are now [available online via ForWarn](#), which delivers weekly Land Surface Phenology (LSP) maps of seasonal vegetation growth and development detected by satellites, as well as national maps showing vegetation disturbances. Forwarn is useful for both monitoring disturbance events as well as year-to-year variability; derived products can also be used to develop insights into seasonal and inter-annual dynamics.
- Michael Keller, research physical scientist with the International Institute of Tropical Forestry, is working with International Programs on a project called, "[Sustainable Landscapes](#)" funded through the United States Agency for International Development, looking at ways to minimize emissions of carbon dioxide from deforestation in the tropics. Michael is also working with the Next Generation Ecosystem Experiments-Tropics, or [NGEE-Tropics](#), approved and supported in early March by Department of Energy (DOE). Led by the Lawrence Berkeley National Laboratory, its goal is the development of a model that represents how tropical forests interact with Earth's climate.

Dave Hollinger, Project Leader, Climate, Fire, and Carbon Cycle Science, Northern Research Station (NRS)

- Dr. Yude Pan of the NRS has received a Bullard Fellowship from Harvard University and will be located at the Harvard Forest next year to continue studies of "CO2 fertilization enhancement on plant productivity and water use efficiency" and also "Natural and human-induced disturbances and their impacts on forest carbon budgets in North America".
- The Northeast Climate Hub has visited recently with University Partners including those in RI, NJ, DE, and MA as well as the DOI NECS to develop connections on forest and farm adaptation. The Hub is also partnering with the State Climatologists and NRCS state contacts to get more localized climate trend data and to roll out Adaptation Training to USDA conservationists. The NE Hub is also very excited about participating in using the Forest Adaptation Workbook in agricultural settings and all the great training that the NIACS/Northern Forests Sub-hub people have been carrying out.
- Now beginning use of Adaptation Workbook (mentioned below) just released by NIACS for adaptation training. There's a lot of work within/across all of the hubs in utilizing this approach with agriculture as well as forestry.

National Forest System Updates

Stephen Handler, R9/Northern Institute of Applied Climate Science-Eastern Region & the Northern Forests Sub Hub

- Leslie Brandt is on maternity leave to care for Hans Leopold Barry!
- White Mountain – Maria Janowiak (NIACS) recently helped the forest with a climate change adaptation workshop. This is the 2nd workshop for the White Mountain and this one is focused on recreation, watersheds, and infrastructure.



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

April 3, 2015—11:00 a.m. (ET)



- *Central Appalachians forest ecosystem vulnerability assessment and synthesis* is now published and available online <http://www.nrs.fs.fed.us/pubs/47885>. This is the 5th in a series of assessments published through the Climate Change Response Framework. The list of authors includes staff from the Wayne and Monongahela NF, as well as state, federal, academic, and NGO partners. Email Patricia Butler (prbutler@mtu.edu) to get a hard copy.
- A New Interactive Education Module on Climate Change Effects - The Climate Change Resource Center (CCRC; www.fs.usda.gov/ccrc/) has released a new interactive online education module on climate change effects on forests and grasslands. The module, "[Climate Change Effects on Forests and Grasslands: What You Need to Know](#)", gives a brief overview of climate change effects on water resources, vegetation growth, wildlife, and disturbances. This is the 2nd of 3 modules.
- NIACS just released a new website featuring an online version of the **Adaptation Workbook**, www.adaptationworkbook.org. The new website is an online edition of the Adaptation Workbook, previously published in [Forest Adaptation Resources: Climate change tools and approaches for land managers](#). This project has primarily been supported by the US Forest Service and the USDA Northern Forests Climate Sub Hub. Contact Chris Swanston for more information.

David Meriwether, Ecosystems Management Coordinator, Southern Region

We continue to have a focus on plan revisions. I want to emphasize the broader-scale monitoring needs as they relate to climate change.

- The 2012 Planning Rule includes requirements for Regional Foresters to develop broader-scale monitoring strategies to support multi-forest monitoring. These strategies are to be developed collaboratively, including with Forest Service Research.
- Forest plan monitoring programs are to include relevant broader-scale monitoring. Ongoing plan revision work is identifying potential broader-scale needs. Consistently, climate change is recognized as a key area for broader-scale monitoring and viewed from multi-forest perspective.
- Drought and sea level rise are key vulnerabilities that have been recognized for which broader monitoring systems have been identified; e.g. sea level at Francis Marion National Forest.
- Monitoring questions and indicators directed to ecological and human systems that are relevant to each forest need to tie also to the available broader-scale monitoring systems. Indicators need to track conditions and trends that are relevant to the management concerns for each forest.
- Scientist and partner involvement is needed to assure provision of best available science.

Presentation

"Belowground carbon dynamics under elevated atmospheric CO₂: implications for long-term carbon sequestration in forested ecosystems" by **Chris Oishi, Research Ecologist with the Southern Research Station's Coweeta Hydrological Laboratory.**

Q&A

Round Robin Discussion



First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service

Eastern Forest Environmental Threat Assessment Center

April 3, 2015—11:00 a.m. (ET)



Access Relay Conference Captioning for this event by clicking on the link below:

<http://www.fedrcc.us//Enter.aspx?EventID=2597904&CustomerID=321>

The next FFACCTs will take place *May 1, 2015* with a presentation by Randy Kolka, NRS.

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.