

First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service Eastern Forest Environmental Threat Assessment Center March 3, 2017, 11:00 a.m. (ET)



FFACCTs Highlights – Joel Larson, Acting Director, USDA Southeast Regional Climate Hub

Washington Office Update

Karen Dante, Climate Change Adaptation and Policy Specialist, USDA Climate Hubs (USDA Office of Sustainability & Climate Change)

- Office of Sustainability and Climate focusing on drought
- Webinar March 22, 2017 from 2:00 3:00 pm ET: Impact of Drought on Recreation
- Drought Workshop in Region 4, March 28-29, 2017

- Expect to develop White Papers from the workshops that will synthesize management options for land managers. White Papers will feed into a national General Technical Report with adaptation strategies for resource managers.

Climate Science Center Updates

Toni Lyn Morelli, Research Ecologist, Northeast Climate Science Center (NE CSC) & University of Massachusetts

- The NE CSC is holding a Regional Science Meeting "Incorporating Climate Science in the Management of Natural and Cultural Resources in the Midwest and Northeast" on May 15-17 on the UMass Amherst Campus. More information <u>here</u>; registration will open soon.

- Link to recent CSC EcoDrought Workshop newsletters:

http://ian.umces.edu/press/project/usgs: climate change research activities synthesis

- Planning a workshop on Northeast Regional Invasive Species and Climate Change on July 27-28 on the UMass Amherst Campus
- Toni Lyn Morelli presenting on Managing Climate Change Refugia to the APHIS Climate Change Working Group on March 8

- Morelli looking forward to presenting on invasive species as well as an organized session on climate change refugia at the George Wright Society meeting in Virginia in April

Ryan Boyles, Deputy Director, Southeast Climate Science Center (SE CSC)

- USGS sponsored national workshop focusing on drought this June. Sean Carter is leading this effort.
- Kicking off listening tour across the region.

- Station and Regional Updates

Dan Lawson, National Leader, USDA Climate Hubs

- USDA Climate Hubs will be working with the Government Accountability Office (GAO) in response to a request made by the Chair of the Senate Committee on Agriculture, Nutrition and Forestry. The below key questions will be addressed.

- To what extent are the hubs collaborating with various stakeholders and other federal agencies?
- How, if at all, do farmers, ranchers and forest landowners use the information provided by the climate hubs to minimize their exposure to climate risk?
- To what extent are the hubs contributing to the goal of addressing climate-related risks and what are the key accomplishments to date?
- Are there controls in place to ensure oversight and monitoring by the appropriate agencies?

- Work has been completed on a new governance document for how the climate hubs executive committee operates. Chairperson of the committee will now be a senior level official and serve for a two-year rotational appointment.

Kier Klepzig, Assistant Director, USDA Forest Service, Southern Research Station

- Steve McNulty will be on a sabbatical for the next year. Joel Larson will be acting Director of the USDA Southeast Climate Hub for the next four months.



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- Two articles recently came out in the Compass Live newsletter: 1) <u>New Forests, New Water Yield</u> quantifies changes in water yield following natural succession of recently cut watersheds, 2) <u>Air Pollution Could Worsen Water Shortages in a Changing Climate</u> summarizes recent SRS research that found that air pollution could aggravate climate change impacts on water shortages across the southeastern U.S.

- Working with Great Smokey Mountain National Park following the catastrophic wildfires that swept through the park and parts of North Carolina, Tennessee, South Carolina and Georgia this past fall to provide assistance with post-fire reporting and recovery needs

- Kier Klepzig will meet this week with eastern tribal groups to discuss climatic impacts on sustainability of culturally important resources. Good collaborative effort between tribes and state and federal agencies.

Dave Hollinger, Director, USDA Northeast Climate Hub

- The quarterly NE Climate Hub Newsletter was just released:

https://content.govdelivery.com/accounts/USDAOCE/bulletins/188047e

- Early results from a northern peat warming study indicate that low ground warming is only affecting the rate of cycling of new carbon, and does not appear to affect the older stored carbon.

- There will be a cross-border climate adaptation workshop with Canada in Syracuse, NY next October. Contact Dave Hollinger for more information.

- Working with NOAA to set up a drought early warning system in the NE. 50-year drought has impacted most of New England, New York and into New Jersey and Pennsylvania. Impacts mostly on agriculture with minor drought related mortality in forests. More wildfires than usual this past year as well.

- Indications that maple sugaring has started early this year and sugar content is well below normal. Likely due to drought.

Leslie Brandt, Climate Change Specialist (Northern Institute of Applied Climate Science [NIACS]), Eastern Region

- Todd Ontl attended the Midwest NCA stakeholder meeting in Chicago and NIACS led an NCA listening session satellite workshop in Houghton, MI. Stakeholder concerns from these and other locations will be used to shape the report.

- Todd Ontl and Stephen Handler recently worked with the Chequamegon-Nicolet National Forest on incorporating climate change considerations into a large vegetation management project.

- Maria Janowiak and Todd Ontl are going to present at New England Society of American Foresters next week.

- The Northern Forests Climate Hub will be hosting two workshops on adapting watersheds to climate change in the Midwest and New England. The Midwest meeting is the week of March 13 and the New England workshop is the first week of April.

- Leslie Brandt will travel to southern IL next week to work with Ducks Unlimited, USFWS refuges, and the Shawnee National Forest on a bottomland forest adaptation workshop as part of the Wildlife Conservation Society adaptation grant.

- Danielle Shannon will be attending the National Drought Workshop in San Antonio March 21-23 and presenting on Approaches to Bringing Drought Science and Drought Management Together.

- Kailey Marcinkowski will be giving a presentation on climate science (representing Hubs and CCRC) for the Navy's environmental training course March 22-24 at Marine Corps Base Hawaii.

- Leslie Brandt will be offering a ½ day training on caring for trees in a changing climate at Longwood Gardens on March 29.

Emrys Treasure, Regional Inventory, Monitoring and Assessment Coordinator, USDA Forest Service, Southern Region

- The region continues to focus its climate change efforts on plan revision forests. The <u>Francis Marion National Forest</u> has released its final plan and Environmental Impact Statement (EIS), which includes plan direction addressing climate change and sea level rise which is connected to a monitoring driven adaptive management framework. There is a lot of interest in this work as the Francis Marion is the first national forest to complete a revised forest plan under the 2012 Planning Rule. The final forest plan is available on the forest's website for anyone who is interested. <u>El Yunque National Forest</u> in Puerto Rico is following closely behind the Francis Marion and since the last call has released their Draft Forest Plan and EIS which demonstrate a similarly integrated approach to climate change, but in a very different ecological, social, and economic context. Work continues on Nantahala-Pisgah, and soon



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National Forests and Grasslands in Texas will formally commence with their forest plan assessment, which will open up an important opportunity to rapidly assess current conditions and trends based on existing information related to climate and to integrate those with other issues to help inform the development of their new forest plan down the road. The forests in Texas provide a somewhat exceptional opportunity to explore and understand the consequences of climate variability and change for land management, as east Texas is at the intersection of what is already a dramatic ecotone as the forest ecosystems give way to the more arid systems to the west.

- A <u>paper</u> from the South Central Climate Science Center and co-authored by Katherine Hayhoe attempts to answer the question "Are Texas and Oklahoma getting drier?" The paper examines how high pressure systems develop over the region in late summer which suppress convection and late-afternoon thunderstorms. Exceptional droughts develop when this high pressure system is stronger than average and lasts longer. Climate models developed for the most recent international and national assessments are able to reproduce these conditions historically and now that the physical climate mechanism is understood. The conclusion is that the warmer the world gets, the stronger the high pressure system becomes and the longer it lasts and every single model of the 22 examined shows this pattern. Considered together, the findings of the paper robustly support the conclusion that the south central US will become drier and that this would occur during the later parts of the summer and growing season.

Michael Gavazzi, Acting Coordinator, USDA Southeast Regional Climate hub (SERCH)

SERCH sent out a call for cost-share pre-proposals this week. The focus will be on science delivery and science translation for working lands (Forests, Agriculture land and grasslands). Pre-proposals are due March 8. Contact Michael if you have any questions.
SERCH will be attending the SE Regional Engagement Workshop as part of the US National Climate Assessment March 16th.
SERCH is developing fact sheets for each state in the SE US that will focus on threats to their forests and adaptation strategies to address those threats. We're currently reaching out to each of the State Foresters and Extension Agents for feedback.

Round Robin

Presentation

"The effects of climate variability on vegetation phenology across Great Smoky Mountains National Park" - Steve Norman, Research Ecologist, U.S. Forest Service Eastern Forest Environmental Threat Assessment Center

The next FFACCTs will take place April 7.

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