Meeting Summary -- Joint Stakeholder Committee Meeting, June 25-26, 2019

Prepared by Heather Yocum

The North Central Climate Adaptation Science Center (NC CASC) and the USDA Northern Plains Climate Hub (the Hub) convened a meeting of the Joint Stakeholder Committee (JSC) in Boulder, Colorado on June 25-26. The JSC involves representatives from key governmental stakeholder representatives from state and federal agencies and tribal nations across the northern plains region and advises the NC CASC and the Hub on science and research priorities. This in-person meeting was the first meeting of the JSC in several years (see attendee list below).

The meeting opened and closed with discussions about important management issues and questions that JSC members and their respective agencies or tribal communities were facing. These included:

- Water issues, including drought and flooding, and their impacts on humans and wildlife across time scales (e.g., seasonal, multi-year, longer term)
- Fire, including prescribed burns, and how changing fire regimes relate to ecological change
- Plant and animal health and diseases
- Data sovereignty, data production, and data sharing, including who collects and curates data, how and when to make data accessible to diverse stakeholders (e.g., protecting traditional ecological knowledge and facilitating closer working relationships between scientists and users of information).
- How to effectively communicate with diverse stakeholder groups (managers, communities, policy makers, etc.)
- Climate change impacts on plant and animal communities
- How to use climate information to help managers prioritize what actions to take, where to take them, and when to do so.

The meeting included two science presentations. The presentation topics were decided thru premeeting consultations with the JSC representatives about their preferred topics. Dr. Jennifer Balch (University of Colorado) gave a presentation, "Changing fire regimes in the U.S.: State of the science & management implications," which highlighted the human impacts on changing fire regimes. Dr. Shelley Crausbay (Conservation Science Partners) spoke about the causes of ecological transformation in her presentation on "Science to support decisions about ecological transformation."

Robin O'Malley and Aparna Bamzai shared the NC CASC's Strategic Science Plan, which identifies priority research areas for the NC CASC and describes the research capacity of the CU team and consortium partners. Priority research areas around habitat and management issues were identified through research and consultation with state fish and game agencies and federal natural resource management agency partners. Priority habitats include: freshwater ecosystems; grasslands; high elevations; and sagebrush steppe. Priority management issues identified included: water availability; habitat loss and change; connectivity; disease; invasive species; wildlife phenology; and wildfire. Crosscutting themes that relate to NC CASC's capacity included: ecological transition and transformation; wildlife disease; big data and earth analytics; and technical assistance and consulting (e.g., scenario planning).

In the final session, JSC members offered feedback on NC CASC's Strategic Science Plan and offered their own priorities and needs for research. Key themes that emerged from this conversation were:

- The importance of connecting scientists and science research with managers and other users of that information, especially connecting individual researchers with managers to build trusted relationships. This could increase opportunities for co-production, and improve communication about how to use available information now to inform prioritization of management actions. This could also improve leveraging of existing work done by states and universities, and making connection between ongoing and new research projects, to avoid replication.
- The need to identify landscape, regional, or national-level metrics for adaptation actions, including the science needed to support these metrics (e.g., remote sensing of grassland conversion, regional snowpack tools).
- Provide opportunities for agencies, organizations, and communities to learn from each other about what adaptation strategies are working (or not).
- Potential opportunities for engagement could include state wildlife action plans, reaching
 out to rangeland professionals at NRCS and BLM, and/or working on interdisciplinary teams
 that address the social and economic context of many of these changes (e.g., climate change
 impacts on human well-being, grassland conversion, etc.).

Outcomes and Future Plans: The agenda for this meeting was not structured around "decisions" but was instead an opportunity to consult with key stakeholders and tribal nations and gather information on current management plans and decisions. Both the NC CASC and the Hub appreciated the input and perspectives of members and will consider it during planning and implementation of future research and activities. For the NC CASC, "next steps" include additional work on the strategic science agenda described at the meeting, which is likely to be completed (as a working draft) this fall and will be available on the NC CASC website. For the Hub, "next steps" include receiving feedback from the 5-year review process described at the meeting (a working draft is anticipated this winter) and considering how it relates to input from the JSC members.

Attendees:

JSC Members	Organization/Affiliation	In-person vs remote attendee
Margie Connolly	Ute Mountain Ute Tribe	In-person
Greg Josten	South Dakota Department of Agriculture	In-person
Greg Pederson	US Geological Survey Ecosystem Science Centers (proxy for Claudia Regan)	In-person
Julianna Lenoch	US Department of Agriculture Animal and Plant Health Inspection Service	In-person
Daren Reidle	Kansas Department of Wildlife, Parks, and Tourism	In-person
Mitch Cottenoir	Wind River Indian Reservation	In-person
Dennis Longknife	Ft. Belknap Indian Community	In-person

Doug Kluck	National Oceanic and Atmospheric Administration	In-person
1.1.0:	Regional Climate Services	
John Guinotte	US Fish and Wildlife Service Region 6 Ecological	In-person
	Services	
Justin Gude	Montana Department of Fish, Wildlife, and Parks	In-person
Mark Junker	Sac and Fox Nation of Missouri in Kansas and	In-person
	Nebraska	
Taryn Finnessey	Colorado Governor's Office	In-person
Lihn Hoang	US Forest Service	Remote
Lance Foster	Iowa Tribe of Kansas and Nebraska	Remote
Chris Wichmann	Wyoming Department of Agriculture	Remote
NC CASC and Hub Personnel	Position	In-person
and Consortium Partners		vs remote
		attendee
Dannele Peck	Director, USDA Northern Plains Climate Hub	In-person
Robin O'Malley	USGS Director, NC CASC	In-person
Aparna Bamzai	USGS Deputy Director, NC CASC	In-person
Jennifer Balch	University Director, NC CASC; Director, Earth Lab; CU	In-person
	Dept. of Geography	
Brian Johnson	University Deputy Director, NC CASC	In-person
Heather Yocum	Stakeholder engagement, NC CASC	In-person
Stefan Tangen	Tribal Resilience Liaison, Great Plains Tribal Water	In-person
	Alliance, NC CASC	
Noah Williams	Intern working with Stefan	In-person
Shelley Crausbay	Lead Scientist, Conservation Science Partners	In-person
Bill Travis	Deputy Director, Earth Lab; CU Dept. of Geography	In-person
Travis Williams	Student Programmer, NC CASC	In-person
Chelsea Nagy	Program manager, Earth Lab	In-person
Jenny Briggs	Outreach and engagement, CU	In-person

JSC members not in attendance:

JSC Members	Organization/Affiliation
Tom Olliff	National Park Service
Kevin Foley	Bureau of Reclamation
Katherine (Katie) Stevens	Bureau of Land Management
Diane Mann-Klager	Bureau of Indian Affairs
Matt Reeves	USDA Forest Service Research and Development
Laura Farris	Environmental Protection Agency
Claudia Regan	USGS Science Centers
Kevin Whalen	USGS Cooperative Research Units
Tim McCoy	Nebraska
Jeb Williams	North Dakota