

NOAA Climate Services Roundtables Intergovernmental Session Summary

Led by Mary Glackin, NOAA Deputy Under Secretary
For Oceans and Atmosphere, Washington, D.C.
At the Hall of the States, Washington, D.C.
June 27, 2008

Analysis of External Participants:

- 26 states represented over 48 phone lines used, including State climatologists, state coastal managers, state transportation officials, state public utilities (water), state emergency managers, staff from governors' offices, and Sea Grant university representatives
- 2 additional governors' office representatives in the room with us at the Hall of the States
- 3 major cities were represented over the telephone lines: Seattle, San Francisco and San Diego
- 12 intergovernmental NGOs in attendance around the table, including: ICLEI – Local Governments for Sustainability, Coastal States Organization, National Association of Counties, Council of State Governments, National Conference of State Legislatures, National Emergency Management Association, National League of Cities, the Coalition of Northeastern Governors and the American Fish and Wildlife Association
- 1 Indian Nation (Haskell) called in
- 1 State Secretary of the Environment and Natural Resources (North Carolina's Secretary William Ross) called in

Key themes that emerged during the discussion:

- Produce/make available expanded temporal and spatial climate information
- Provide information on the expected impacts of climate change on a local/state/regional level
- Develop robust, 2-way communication with NOAA regarding climate information and services
- Support user-driven research to support state/local/regional adaptation efforts
- Strengthen and sustain the density and quality of climate observations
- Use existing extension agents and networks to more effectively communicate with policy/decision makers, improve understanding of user needs, and enhance credibility

Mary Glackin opening discussion:

Climate will be NOAA's number one priority through the transition. We want to share with the participants where we are with a National Climate Service and next steps. There is a compelling need for climate information and decisions are being made every day without the information. And we need it now. There is currently no one-stop shop for users to interact with the federal government on this issue. The Nation needs a National Climate Service within NOAA, and a Climate Services partnership that spans govt, business, academia, etc. We need to deal with climate on the ground – WFO, SG community, etc – our stakeholders need cohesiveness.

Ron Regan – Association of Fish and Wildlife Agencies – His organization is spending lots of time on climate issues. Have a commitment to deal with climate and have hired a NOAA employee as a science liaison. Asked, “To what extent do you see your services addressing terrestrial issues? The scale is key and our states need data at the regional, and hopefully state level.”

Mary: Issues at the coastline and Living Marine Resources will be the top two issues to tackle. With respect to scale, the key will be access to HPCC and completing our observing networks.

Zoe Johnson – State of MD, re: sea level rise: “We work with a number of the NOAA entities and find that climate information is scattered throughout NOAA –I know that NOAA is looking at not recreating a lot of the pieces of this but may be looking to streamline current processes. How will you structure a Climate Service?”

Mary: A lot of that discussion is taking place now and has not been decided as yet, but we need to look at it from the perspective of the customer. Regardless of how we wire ourselves internally, we need to focus on this from a customer service point of view. It's clear from our discussions this past week in Vail that climate information is spread all about. And it's clear that the web is not the answer to everything. We need to take these things into consideration.”

Frank Steinberg – Lewis Burke Associates: “How will the split fall between what NOAA does and what assoc/academia/industry do?”

Mary: “More research and modeling are needed. We will still keep our competitive grants program. We need our partners. Internally we will also have grants programs. We'll need to work with our partners to get that done.”

Julia Wyman – Coastal States Organization: “We have a concern that the proposal focuses too much on physical aspects – What about all the other elements regarding climate, such as the coastline?”

Mary: The discussion is beginning re: what all of the other parameters look like. We need to include states, other federal partners like USGS to explore those parameters.

Meredith Inderfurth – Association of State Flood plain Managers: “We think this is a great idea. We need it now. A National Climate Service is exceedingly worthwhile, but daunting. You’ll be hearing from lots of people. How are you going to organize and access all of the information? I’m a little bit confused about who the audience for a NCS is?”

Mary: This will be a multi-pronged approach. 1) Engage networks that we already have (e.g. SG, NERRS), 2) add resources to programs such as RISA, 3) Engage our Local Weather Forecast Offices, 4) disseminate simple information that is accessible for the public. NOAA is a leader in this area and there is a void in national leadership, but at the end of the day, it will not, can not, be all about NOAA. In Vail, the decision makers are ready to “just do it” ... The feeling is that what we develop initially won’t be perfect, let’s just try it... Other audiences want it to be better developed before we roll it out. I am just so impressed with the demands for information that are out there. It will be key to differentiate between research and applications. There should be no blockades between that transition from research to operations.

Julie Ufner, National Association of Counties: “Counties are struggling with hurricane destruction, zoning for tourism, and the challenges of keeping folks safe when hurricanes come, and knowing where to rebuild. My question is: How do we keep people safe and there’s the bigger issue of where is it safe to rebuild after one of these events?”

Mary: (Acknowledged hazard resilience as an emerging theme connected to climate change and NOAA’s ongoing effort to develop decision support tools for communities to provide this type of guidance, along with our FEMA partners.)

David Behar, San Francisco Public Utilities Commission: “We have been following the CCSP research process and the enabling legislation. Please speak to the elements that are also key to a system of coordination. There are a lot of capital investments made at the local level. Outreach and communication are key. This calls for ongoing consultation between state, regional and federal government. We would like to add local governments to that so that the end user community has all of the right elements. What is your vision for outreach and communication for a National Climate Service? How do you see that kind of consultation happening? It seems that this could be very useful but also challenging.”

Mary: There is a growing recognition in the science community that research is based on the questions posed by scientists. That needs to change although we still need to ask the science questions. We will form advisory boards to provide a mechanism to bring this information in. We need a tiered mechanism at the federal level that can be sharpened at the NOAA level and with other agencies as well.

David Behar: “As this takes shape, we encourage you to bring in the states, water utilities, etc. to help form that advisory capability. That two-way communications process is important.”

Phillip Mote – University of Washington– State climatologist for WA state: “I have a comment related to global climate observing. I want to confirm the value of good observation and the need for real people on the ground involved in observations. Folks

need to know who to call locally (e.g. state climatologists, RISAs) Connecting the national scale to the local scale is crucial and the range of time scales makes a big difference too. One of the most challenging tasks is to respond to events like flooding, cooling, warming, etc. People want to know why something happened and what it means. But researchers aren't always interested in responding to that.”

Mary: You're right. I'm glad there are so many state climatologists on this call today because the state climatologists are part of the solution to the problem. We need to build trust and it isn't a matter of saying that the federal government is here to help. We also need to support the global climate observing system. But it needs to go beyond that as well. The issue of scale and attribution are big ones, but the key will be that we need to draw the line between weather and climate.”

Paula Cullenberg, Alaska Sea Grant: “In Alaska, we are feeling huge climate change impacts already throughout the state. We have sea ice thickness, etc. There is a fair amount of anxiety regarding climate change. People agree the impacts are happening but don't feel they have access to the information and where to go to get it. In many areas, we are not even road-connected. We certainly have the internet but often not the roads. We struggle to localize information and get it to the communities. We want to work with NOAA down to a local level to make the tools available. With 20 extension agents in 11 communities, we are committed to working together to get information at the right scale to the communities.”

Jim Angel, IL State climatologist: “I want to echo Phil's comments earlier about the value of climate services is increasing over time. Folks are thinking in terms of future time scales when they look at climate change (e.g. How does the pattern today compare with that 10 years ago?) What do you see the role of the state climatologists being under a National Climate Service scenario?”

Mary: I have nothing specific but lots of thoughts – For example, how do we strengthen the linkages? There is a concept of how we empower people on the ground and at the edges in terms of service delivery. Within NOAA we're looking at Sea Grant agents, sanctuaries, our warning coordination meteorologists, plus all of their counterparts in other agencies, such as [USDA] extension agents and so on. That is all part of extension and outreach. We're using the dialogue we're having now with those parties to shape this concept for a Climate Service.

David Stooksbury – GA State climatologist: I urge [NOAA] to exercise a bit of caution. The data needs for state climatologists will vary and are different. You can't take an operational weather forecaster and turn them into a climatologist. I encourage you to work with the state climatologists, most of whom work for universities and have additional non-governmental credibility. I'm glad to hear of NOAA's interest in working with state climatologists but when I look at the second and third bullets of the briefing sheet we received by e-mail, I see that those are things the state climatologists are already doing... I want to emphasize that providing state climatologists with data is not the same as providing information. You can't claim that providing data is providing information. We need to leverage what we already have and we need to get information to decision makers in ways they understand. Providing data is not engagement. My suggestion to bring this into focus would be to recommend something like a Sea Grant model for climate. You might want to think about setting up “Climate Grant Colleges.”

Mary: David, that's an interesting idea and I appreciate that. We'll add it to the input that we're gathering. You emphasized the skill set of this service and that's key. We also need to look at other disciplines like the social sciences. Climate information needs to be strengthened and reinforced. And decision support should be at the heart of a National Climate Service. The concept of climate colleges is a good suggestion.

Frank Lichtkoppler, OH Sea Grant Extension Agent: "Two-way communication is essential. Where we are located, the current models in Great Lakes are different than the oceans. Lake levels are likely to drop. Even within the Great Lakes, the climate effects are changing. You have support here out in the field and NOAA gains credibility by having us. We are also able to ensure that the science questions are applied so the research is directed to useful questions. We need to model on applied research."

Gary Lytton, Florida Rookery Bay Reserve: "I agree that two-way communications is very important. We ask that as you move forward you strongly consider using existing networks of protected areas – NERRS CTP/Sanctuaries."

Mary: Yes, I should have mentioned NERRS before so thank you for reminding me. It's clear we need to look at observations as an important area as we plan our outreach and education strategies. It's also clear that we need to look at sectors and geographic areas. What are your thoughts about regional areas? We need to support decision making in different sectors but also from a geographic perspective."

Gary Lytton, Florida Rookery Bay Reserve: "I think it would be useful for NOAA to take a regional approach to this service."

Dennis Todie, SD State Climatologist: "I'm glad to hear that state climatologists are part of the dialogue in developing a NCS. State climatologists are a valuable resource. The opportunity to collaborate would be helpful. Observations have been discussed on this call. We need to fill holes in our current observing network and we need a broader range of observations. We need more detail."

Mary: Thank you. This is a good opportunity to mention that we have NOAA leadership speaking [July 7-10] at the annual meeting of the American Association of State Climatologists (AASC) [in Burlington, VT. Vickie Nadolski, Deputy Assistant Administrator for Weather Services, Chet Koblinsky, Director of the NOAA Climate Program Office, and Charlie Baker, Deputy Assistant Administrator for Satellite and Information Services, will make a joint presentation on NOAA climate services.] We are moving forward with the Climate Reference Network and looking to sustain or fortify climate observations within NOAA. We need sustained altimetry observations, for example. We have spent lots of money to do that and have more work to do to ensure that it is fully operational in future decades. We consider all of those efforts shoring up what we have. In other areas we have significant shortfalls. NOAA needs engagement and focus to lay the path and underscore what needs to be done.

Walter Parker, Parker Associates, Institute of the North/Arctic Council, Alaska: "I am a delegate to the Arctic Council. We issued an Arctic Climate Impact Assessment (ACIA) in 2004 and will resume at the International Permafrost Conference in Fairbanks next week. I appreciate NOAA's efforts regarding large marine ecosystems and

regionalization related to large marine ecosystems. This is something I hope more time will be devoted to. I understand a lot of this depends on funding needs. The relationship between large marine ecosystems and the ACIA will be critical and we need this type of scientific input going to decision makers.”

Mary: You remind us of the breadth of the challenges and the need to prioritize..

Molly McCammon, Director of the Alaska Ocean Observing System: “I want to emphasize the importance of the regional component of the integrated observing system and the need to include the regional associations. All of our programs are user-driven. We provide another infrastructure.”

John Payne, Director of the North Slope Science Initiative, Alaska State Office/Bureau of Land Management: “I encourage NOAA to look more closely at the marine and terrestrial link – particularly in the Arctic. We are seeing rapid changes and coastal impacts as the sea ice retreats. As it retreats, we see inverse retreats to the ecosystem. The drier air coming in causes changes that seem counterintuitive. We’re seeing fires and changes to the perma frost. We’ll see socio-economic and biological changes as well.”

Jan Curtis, climatologist for the Oregon National Resource Conservation Service: “Quality control and quality assurance are the backbone of uniform data. What will a NCS do to control the quality of data and ensure standardization of data?”

Mary: This is something that is still being batted around in all of our discussions. In considering our initial strategy, we realize we can’t do something with all data sets and that we need the owners of those data sets commit to adhering to the 10 Climate Monitoring Principles. We (NOAA) will step in and monitor some of those. We are focused on this problem and committed to getting all of NOAA’s data sets, including our satellite based observations, in shape and ready to go. We need to look at the composite data system and our satellite observations. You should take comfort in knowing that Tom Karl is working the issue.

Will Sheftall, FL State Extension agent (formerly Sea Grant extension agent for 10 years): “I’ve spent 26 years in Florida in the field. There are a lot of us in the field who work with land grant programs and where we can leverage information that is needed. There are a lot of land issues we need to consider that are being affected by climate change impacts. For example, planting for hardiness zones and looking at 20 to 30-year planting cycles can be affected. The invasive species range is changing. All land issues are related to climate change to some extent. Bringing USDA’s extension service fully into the process makes sense. It works at the local level and we need to work more that at the federal level. NOAA, USDA, and CSREES should be working more closely together. The Land Grant Program covers all of the sectors.”

Mary: That’s good input. Thank you.

Michael Knapp, Statewide Hydraulics Engineer, AK Dept of Transportation and Public Facilities: “I commend NOAA’s regional efforts in Alaska and the way that you’ve brought stakeholders to the table [on this proposed service]. We need to build out

the Climate Reference Network. Do you envision a regulatory responsibility for the NCS?

Mary: No. We don't see it. There should be an unbiased nature of a National Climate Service and the type of science information the service can provide should be viewed that way. There are other federal agencies that already have the regulatory role in climate change. That function might be better served in agencies with a regulatory role already in their mission.

Daniel Wildcat, Haskell American Indian Nation: (Is with a network of agencies, tribes, NGOs, business, etc. involved in climate change): "What has been the representation of tribal governments? I have a suggestion: NOAA needs to take full advantage of tribal colleges and nations. Please keep in mind the traditional community-based knowledge that exists within tribal nations and colleges and use it as a resource. There are lifelong observers who have maintained traditional observations in their lifestyles for many years. There is an intergenerational transfer of knowledge that can be valuable in climate observations. I want to emphasize the need for socioeconomic and other human dimensions of climate change. Our people live on the ground and NOAA needs to integrate their knowledge into a National Climate Service. Again, use the tribal colleges (36) and networks.

Mary: We have been meeting with my colleagues at DOI and discussing the linkages to tribal communities so I can appreciate what you're saying. There are a lot of opportunities there. Beyond the informal discussions with the tribes, we are just at the beginning of outreach in the tribal area. You're right; there's very much a need for using these types of resources in the ecological and social sciences.

Steve Goldbeck, Deputy Director, Climate Change & Legislation, San Francisco Bay Conservation & Development Commission: "Here in the Bay area, our answer is a lot like Maryland's answer to a state climate plan. We have an adaptation focus in our State Climate Action Plan. We'll be doing vulnerability assessments as part of that planning process with our communities." (Also asked about the link between the CZ program and climate.)

Mary: At our workshop last week in Vail, we discussed climate and coasts. There was a focus on resilience. We already feel like we're vested in water resources – drought and extremes; the other two areas are 1) coastal and, 2) living marine resources. In reauthorizing the CZMA, we should build around hazard resiliency and adapting to climate change. We've worked with the University of Washington RISA [and ICLEI – Local Governments for Sustainability] on the Preparing for Change climate adaptation guide. I think you all have information in your packets to find out how to download the guide or order it. For a National Climate Service, we feel already invested in water resources, drought, extremes and coastal extremes and the coastal-marine ecosystem are part of it.

In closing, I want to emphasize that there will be a change in administration and this is a good time to consider a National Climate Service. We will need support in the new administration for this to take place. We feel this is the right time for a National Climate Service and we'll appreciate your continued input as this unfolds. Please be sure to contact us at climate.services@noaa.gov and stay in touch.