STS MEETING NOTES

MAINE CLIMATE COUNCIL

Science and Technical Subcommittee (STS)

5th Meeting (Conference Call) – February 5, 2020
1 -4 PM

STS meeting 2/5/20


Welcome and roll-call

MCC Update and Review of January 29th MCC Meeting – Cassy

- 1/29 meeting went extremely well, with very positive feedback all around. Between 300-400 attendees in total. Thank you to STS members for presentations and hard work to prepare for the meeting.
- Feedback on 1/29 meeting
  - Bob: great feedback in general. To have the who spread of issues presented in relatively short period of time was very helpful -identified interconnections.
  - A little concerned about the anonymous flyer placed on car
  - Sally: the main content of the info was helpful, some new pieces that Audubon staffers appreciated. The afternoon breakout sessions were very helpful as well.
  - Health and economic issues were good additions, scientists don’t always come across these
  - Cassy: data collection and monitoring
  - Amanda: different groups are taking different approaches to organize and analyze information but have ended up at relatively similar places along the path. The STS’s work can really help inform the recommendations of the working groups.
  - Rick: ecotones and dramatic thermal gradients as a theme really transcended different groups. Temperature gradient should be more emphasized in coastal/marine STS section (E to W Gulf of Maine). Many species both on land and in ocean are on the boundary of their ranges in Maine/Gulf of Maine.
  - Ivan: youth lunch was very energizing, lots of young people who were engaged and enthusiastic. Very positive, engaged group.
The STS presentations were great, good energy in the room, enjoyed conversations in the afternoon.

- Carl: agree with getting behind monitoring programs as a means of adaptation
  - Energy breakout: specific policy recommendations to meet our mitigation goals. Is it our group’s purview to recommend policies?
  - Cassy: the day was really designed around looking at working group scopes rather than specific policy recommendations.
  - Will the STS be weighing in quantitatively on WG recommendations? Yes, and it will probably vary depending on the working group needs and the role they’d like the STS to play in making the development of those decisions. We will also work through ERG and CBI to interface with the working groups.

- The cost-benefit analysis consultant has been selected: Eastern Research Group (ERG). They will be coming on board quickly and will be working with the STS and working groups to prepare for beginning their analyses.
  - STS members generally commented that the timing would be good for ERG to join the in-person STS meeting on March 11th. They could do a short 15-minute discussion about what they plan to do and who they are -let Ivan know if that have an agenda to connect on. 30 mins total with Q&A, preliminary planning.

Discussion about Finalizing Phase I Report

- Finalizing the phase I working document
  - Ivan has almost all the documents in hand. Thank you for tolerating this process for getting to a non-typical document on a fast timeline.
    - The plan is to take everyone’s sections, replace with new material where appropriate, and hopefully by the end of Thursday we’ll have all the sections ready. Then we will create a document -Ivan has some help from UMaine public affairs people to make the outline aspects of the document a little cleaner and more presentable. Everyone will be able to review with a quick turnaround time requested, then it will be posted to the MCC website and shared with the working groups.
  - The STS members agreed to standardize the “highlights” section of the report to have consistent formatting across topics areas.
  - Rick: it would be important to standardize the highlights section a little more, similar formatting and very concise/consistent across topic areas.
    - Editing the highlights section would be very helpful to be more of a summary and accessible to the general public.
    - Steve wrote a couple of sentences at the end of the SLR section about what it all means that could be moved forward.
    - The priority needs could also be moved forward and made more prominent
      - Ivan thinks this will be more important in Phase II. It would be a lot of work to standardize that right now.
  - Phase II will have a more consistent structure and priority needs -it’ll have more organization and Ivan would be more comfortable calling it a report.
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- Cassy will work with the individual groups to revise the highlight sections - both at front of document and in the individual chapters. Then Ivan will go to the public affairs folks at UMaine for a little help with the formatting.
  - Cassy will translate everything into short statements, rather than long paragraphs or bullet points.
- Steve: most important thing they heard was stitching together the different sections, e.g., saltwater intrusion into groundwater and marshes. Will be important to reference different sections within text.
  - Ivan: if section lead authors know of important linkages in different sections, please add those.
- If any changes are made, please do them TODAY. Cassy will work with authors on their summary highlights, and Ivan will get the document to Cassy by Friday.

• Discussion of Phase II Tasks
  - Phase II timeline
    - Cassy: should have much of the work done by the June MCC meeting, can continue being updated over the summer until the final report is delivered (August-September)
    - Jonathan: suggest using Mendeley or Zotero for a group recommendations library so that the final report is easier to compile in the end.
  - Report content:
    - A few areas/chapters to be developed further: lakes and water quality, veterinary health/one health, biodiversity as its own chapter, etc.
    - Additional expertise:
      - Bring key folks in to help develop chapters
    - References: we’ll use a standardized system to organize and format
    - Biodiversity - marine
      - Divide up some of the information between the marine and biodiversity chapters. Pinnepeds, cetaceans, and seabirds - didn’t tackle ecosystems, commercial species, food webs, etc.
      - Marine section approached as ecosystem services
        - Impact of invasive species - Nichole would like to keep in the marine section
      - Impacts of SLR on marine ecosystems
    - Lakes -> freshwater quality
      - Streams - lots of DEP folks have been providing data, currently in biodiversity section. Could it be lakes and streams?
      - Linda Bacon originally compiled data on lakes and streams
      - Implications for biodiversity and species - keep in biodiversity section.
    - Hydrology -> freshwater quantity
      - Ice-out probably makes more sense with hydrology section
      - Riverine flooding - info on this is a priority need identified in this section.
    - We should have a section describing uncertainty (Nichole)
    - Priority needs that may not fit into a single chapter but might cut across chapters
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- Audience: our own working groups and Maine Climate Council

- Length
  - Not much longer than the document already is
  - Are we responding to WG requests for Phase II?
    - Yes - capturing a response to WG needs. Phase II report will present a more mature product. We'll also provide information and guidance to WG deliberations or work with ERG on data and evaluations.
  - What's the role of the STS with recommendations?
    - The STS will not make mitigation or adaptation suggestions, that's the purview of the WGs, but certainly suggestions could be passed along to the WGs for their discussion with their broader stakeholder representation.
  - Executive summary with an intro chapter, then series of individual chapters.

- Maps
  - SLR maps are pretty far along
  - Not much for riverine flooding - identified as a priority need in water quantity/hydrology section
    - FEMA maps are a start
    - Could discuss impacts of this on infrastructure, level of preparation and ecosystems
  - Extreme weather event distribution - any information?
    - Emergency management WG is thinking about identifying more heavily populated areas that need better flood maps
  - Glen: might be worth directly addressing issue of uncertainty at scientific level and human response to climate change. This would emphasize the importance of policy and doing something about climate change.

- Need for subgroup breakouts?
  - SLR?
  - Maps?
  - State carbon budget: Aaron's center came out with an initial factsheet about this
    - Subgroup around defining the carbon cycle in Maine, definitions of carbon neutrality, etc?
    - The Transportation WG is working on updating emissions data. Would be good to have a discussion about the needs
      - Let Ivan know if you're talking with them
    - Might be useful to have a subgroup discussion about this topic
    - Carbon sequestration in marine environments?
      - Nichole gave a presentation on this to the coastal and marine working group, she's happy to work with the forestry carbon cycle folks
    - Dan Hayes, UMaine, was involved in this and the N American chapter of the national report (NCA?). Bev Johnson at Bates helped estimate blue
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carbon in that regard. No ongoing significant effort to include marine in this first version.

- Andy: identify the places we need to watch (ag, marine, forests), put together ballpark estimates of carbon sequestration, and wrestle with the boundaries of carbon estimates in Maine (in-state and out of state, induced emissions, exported emissions, etc.). Would be useful to help the MCC think about these boundaries.
- Sally: future ability of peatlands and wetland to sequester carbon will probably change, so just wanted to point out that this should be considered.
  - Ivan: we’ll send out a slightly revised outline based on this discussion, ask the chapter leads to edit their sections and return them for an initial working outline of what the Phase II report might look like.
  - Jonathan: if STS members come across an article talking about economic impacts of your area, please send it to him and Adam.

- Report formatting
  - Template for formatting, references, etc: that would be very helpful. Should we have one?
  - If someone could turn out a template that would be great, Ivan, Bob, and Cassy will refine it and share it with the group.

- Interfacing with the WGs and Eastern Research Group (cost-benefit analysis consultant)
  - Many STS members have been attending WG meetings and are working with them in a mostly organic process.
  - For some WGs, this will be a function of what ERG is doing
    - We’ll validate the approach, data, and assumptions that they use
  - Otherwise, responding to WGs as we go. The ability to have lots of discussions is just limited from a practical standpoint.

- Plans for March 11 STS meeting in Augusta (1-4pm)
  - ERG
  - Phase II
  - Information needs
  - Perhaps carbon discussion
  - This is an important meeting, may not have in-person meeting in April and May is right before the delivery of WG recommendations to the MCC. Much of the focus now is on the WGs in the next couple of months.