

# MAINE CLIMATE COUNCIL

## Scientific and Technical Subcommittee

(STS)

17th Meeting (Zoom) – February 18, 2024

9 AM – 12 PM

### DISCUSSION NOTES

Members in Attendance: Steve Dickson (co-chair), Ivan Fernandez (co-chair), Susie Arnold (co-chair), Adam Daigneault, Alix Contosta, Alyssa Soucy, Andrew Barton, Carl Wilson, Cindy Eisenhower, Damian Brady, Edward Roedel, Eileen Johnson, Gail Carlson, Glen Koehler, Glenn Hodgkins, Hannah Baranes, Jason Lilley, Jonathan Rubin, Kanae Tokunaga, Kristen Puryear, Linda Bacon, Muhammad Drammeh, Nicholas Record, Pamela Lombard, Peter Slovinsky, Phillip deMaynadier, Rebecca Lincoln, Sean Birkel, Susan Elias. Members Not in Attendance: Aaron Weiskittel, Allison Gardner, Amanda Cross, Andrew Goode, Bradfield Lyon, Caleb Goossen, Daniel Hayes, Darren Ranco, Joe Kelley, Kathy Mills, Lily Calderwood, Senator Matt Harrington, Representative Mark Michael Babin, Mark King, Nichole Price, Rachel Schattman, Rick Wahle, Sally Stockwell, Senator Nicole Grohoski, Todd Ontl, Representative Vicki Doudera. Additional Expertise Affiliated with the STS Process: Allison Bistline-East, Nathan Robbins, Parker Gasset, Val Watson. Observers: none.

*Reference meeting slides for additional context.*

#### Meeting Action Items:

1. **Information Needs:** The latest compilation of the information needs assessment, as a word document that is accompanied by a spreadsheet, will be shared with the STS likely next week for final review by members.
2. **Report:**
  - STS members should focus on finalizing their content including resolving any open comments between now and March 5.
  - Between now and next Wednesday 2/21, the individual sections will remain independent as they are now.
  - On Wednesday 2/21 the independent sections will be consolidated into one document.
  - Between 2/21 and 3/5, final edits can still be made, but will be in the new full document.
  - On March 5 the content will be considered final for members so that the writing team can formulate a complete draft.

**9:00-9:15**     **Welcome**

- Welcome, logistics, zoom protocols, land acknowledgement.
- Late breaking SLR/Coastal FYI for STS?

Introductions provided by co-chairs Steve Dickson, Susie Arnold, and Ivan Fernandez. Meeting materials will be available following the meeting on the Maine Climate Council STS webpage.

Recent storm events in December and January set record high water levels for most of the state creating widespread impacts, and in many cases, the impacts were in places that most people living in the state today have not seen in their lifetime. The current high tides continue to be 1-1.5' higher since the January storms, and it's currently unclear the reason for these anomalies, whether they are a short term or represent a longer-term trend is to be determined.

### **9:15-9:45 Updates and Discussion about assessment report process**

- Steering/WG/Special Meetings
- Draft Report Timeline and logistics
- Figures and Table Needs
- Information Needs section

The Steering Committee met two weeks ago. The State of Maine submitted a \$75M proposal to NOAA for resilience work. The State has also submitted a \$50M proposal to EPA's pollution reduction grant. GOPIF has also received EPA funds and is hiring a consultant to model GHG reduction pathways, they will be starting in March. GOPIF is also working on evaluation of community engagement, results available in May.

Ideas that have come up for March STS presentation so far – high water levels from December and January storms, lunar nodal phase cycle influence on water levels going forward, mental health coping impacts, and how power outage impacts are known but we have not yet seen the full effect on communities.

Examples of identified cross jurisdictional issues include getting out of harm's way, working waterfront infrastructure, local seafood and adaptation for industry, land use focusing on compact development bringing together housing, energy siting, emissions from waste and materials under material management task force as well as disaster debris management.

The STS is developing the latest assessment report. The information needs assessment is nearing completion and will be shared for final review. For the assessment report, members should continue to focus on what the latest science is on topic areas that STS members feel are important to be included. The topic areas covered support the working group strategy development, but the topics do not need to be limited to only the strategies in the climate action plan. Between now and March 5, STS members should focus on finalizing their content. On March 5 the content will be considered final for members so that the writing team can formulate a complete draft. A draft line-up of topics and times to conform to the time limits we received from GOPIF earlier today were developed for the MCC quarterly meetings.

Questions, Comments, and Discussion:

- At this point should we be working with Jess while she is away? No, members should be making changes, but if there are specific questions for Jess, please leave those in the document as unresolved so that Jess knows to get back to you when she returns.

**9:45 Roundtable discussion of Maine Climate Council March 14 STS presentations.**

1. Human Dimensions
2. Human Health
3. Climate

A primary task for today’s STS meeting is to discuss the STS presentation at the Maine Climate Council March 14 zoom meeting. The goal will be to convey 'need to know' information for the MCC and WGs', each topic has 5 minutes. The section leads or their alternates will be presenting and hopefully can discuss emergent plans this Friday in the roundtable discussion. The MCC meeting will also include a presentation on equity that will come after the STS presentations.

Roughly 3-5 slides per topic. The initial outline for topics and speakers for STS presentation is:

Panel Q&A		
Panel at the March MCC Meeting		
Topic	Time	Who
Intro/Context/Glob Sci	5	Ivan
Human Dimensions	5	Cindy
Human Health	5	?
Climate	5	Sean
SLR/Storm Surge	5	Pete
Marine	5	Nichole
Agriculture/Food	5	Glen
Forests/Biodiversity	5	?
Info Needs	5	Steve
Science/Hope	5	Susie
Panel Q&A		

Human Dimensions (Cindy) – focus will be economic impacts looking at tourist sector as example, they will also focus best practices for social resilience, and on participatory governance highlighting procedural justice and indigenous communities.

Questions, Comments, and Discussion:

- Will this include adaptation in marine and coastal? Idea is to cover community resilience at communities, which should be applicable inland and coastal.
- The Human dimensions group would like the opportunity, in the future, as we get more established into the STS framework, to work more closely with other groups on cross-sectional connections.
- STS co-chairs requested some information on what the equity training content will be at the March 14 meeting so the STS presentations can draw on that for their presentations.

Human Health (Rebecca) – focus on new research on mental health impacts because of extreme weather events and extreme weather periods as well as with grappling with climate change implications more broadly. Also, include health implications as Maine shifts from a colder to warmer climate focusing on physiological implications as people in Maine and infrastructure is not well-adapted currently. They will also be including health implications from drinking water supplies, from vector-borne diseases (ticks), and food insecurity and food and water-borne diseases.

Climate (Sean) – focus on temperature and precipitation trends and extremes/events globally and what we experience in Maine. Include 2020 driest growing season, and 2022 warmest, and many other key metrics consistent with previous reporting.

### **Break**

4. SLR/Storm Surge
5. Marine
6. Agriculture/Food
7. Forests/Biodiversity

SLR/Storm Surge (Pete) – highlight recent trends seeing in SLR and how MCC scenarios from 2020 relate to current 2024 report, including ice sheet thresholds which are being exceeded since last reporting. Also focus on available products to view water levels from SLR. Include lunar tidal cycles. Include coastal tide gauges and what SLR will look like at those locations.

Marine (Damian) – summarizing ocean acidification, right whales, lobster, and fisheries, as well as aquaculture and HABs. Solutions also including blue carbon and offshore wind.

Questions, Comments, and Discussion:

- How could marsh migration best be included – SLR/storm surge or marine? Follow up convo on where to best incorporate.

Agriculture (Glen) – increased weather variability is already affecting agriculture. There are underutilized opportunities to better utilize available data for farmers to be better prepared – weather forecasting and longer-term climate. Opportunities to utilize insurance programs better to support farms. Temperatures affecting growing zones do not translate to other crops being able to be grown – same soils, and frost timing. Enteric fermentation from cows and to lesser extent manure management are largest Ag contributors to emissions, but anaerobic digestion is available and can work with MSW. There are also opportunities to use new low emission fertilizers. There are opportunities to address liability with food waste donation.

Questions, Comments, and Discussion:

- The Materials Management Task Force will also be looking at food waste, anaerobic digestion, and other related topics. There is an opportunity for connection between these two.

Forests/Biodiversity (Adam and Kristen) – cover amount of sequestration currently in forests, as well as opportunities to increase sequestration meeting climate goals as well as production needs. Include information on wildfire in Maine and the region. Will include some social science constraints, including differing opinions highlighting recent surveys on taking adaptation measures for forest management. Will highlight that biodiversity loss is accelerating, and climate change is a major driver, but there is more we can do to slow these declines –show this through several species. Also are seeing species shifts that are a concern with increasing habitat fragmentation. Also, will provide an update on reaching 30% land conservation target – Maine has been increasing conservation recently but not at pace of other New England states, and there are opportunities to highlight.

At the end of the STS talk Susie will close with a brief presentation on hope drawing on behavioral psychology focusing on actions and strategy pathways.

Questions, Comments, and Discussion:

- Include community-science
- Also, include community response from the storms, noting regulatory agencies work for facilitating rebuilding
- Include that it is OK to feel despair as a part that is a transition to hope
- When will the GOPIF template slides be available? Don't know, but as soon as available co-chairs will send along.

### **11:10-11:15 Photos of Climate Science in Action in Maine**

We are slowly accumulating some great images of science in action here in Maine. I know a number of you have expressed the intent to provide some imagery to this collection, so please do. Thank you to those who have already. Recall we may use these in the assessment report as well as later STS communications.

### **11:15-11:25 Public Comment**

No public comment received.

### **11:25-11:30 Next Steps and Wrap-up**

Co-chairs wrapped up with a few next steps.

**Information Needs:** The latest compilation of the information needs assessment, as a word document that is accompanied by a spreadsheet will be shared with the STS likely next week for final review by members.

**Report:** STS members should focus on finalizing their content including resolving any open comments between now and March 5.

Resources:

- [Report Outline](#) with links to individual sections.
- [Combined Full Report](#)
- GOPIF [accessibility guide for presentations](#). Some of this is above and beyond what we do as standard practice, but we're working on incorporating more of these. Other important points are using accessible language, spelling out acronyms, and making text and charts as large and clear as possible.