
**Governor's Council on Climate Change (GC3)
WORKING AND NATURAL LANDS WORKING GROUP
WETLANDS SUB-WORKING GROUP
MEETING MINUTES**

Meeting Date: May 1, 2020

Meeting Time: 1:00 pm

Meeting Location:

Teleconference

ATTENDANCE

| Working Group Member | Title | Organization | Present |
|-----------------------------|---|---|----------------|
| Leslie Kane | Managing Director | Audubon Connecticut | Y |
| Rick Bennett | Science Director | USFWS | Y |
| Chris Elphick | Professor | UConn: Ecology and Evolutionary Biology | Y |
| Julianna Barrett | Associate Extension Educator | UConn Sea Grant & NEMO | Y |
| Michelle Staudinger | Science Coordinator | USGS, Northeast Climate Adaptation Science Center | N |
| Kimberly Lesay | Transportation Assistance Planning Director | CT DOT Office of Environmental Planning | N |
| Jeff Shamas | Wetland and Soil Scientist | Vanasse Hangen Brustlin | N |
| Rudy Sturk | Senior Manager | CT Green Bank | N |
| Stephen Lecco | CEP, AICP, Senior Analyst | GZA | N |
| Gwen MacDonald | Ecological Restoration | Save the Sound | N |
| Denise Savageau | Director | Greenwich Conservation Commission, retired | Y |
| Jamie Vaudrey | Assistant Research Professor | Department of Marine Science, UConn Avery Point | Y |
| Anne Hartjen | City Planning | New Haven | Y |
| Peter Auster | Senior Research Scientist | Mystic Aquarium | Y |

| Associated Staff | Title | Organization | Present |
|------------------|----------------------|------------------------------------|---------|
| Rick Jacobson | Bureau Chief | DEEP, Natural Resources | N |
| Jenny Dickson | Division Director | DEEP, Wildlife | Y |
| Cary Lynch | | DEEP, Energy Research and Planning | N |
| Debbie Surabian | State Soil Scientist | USDA-NRCS | Y |

| Public Attendees | Affiliation | Comments |
|-----------------------|--|--|
| Robert LaFrance | Audubon Connecticut and GC3 Finance Working Group | none |
| Corrie Folsom-O'Keefe | Audubon Connecticut | none |
| Luke Miconi | Audubon Connecticut | none |
| Lillian Ruiz | Council on Soil and Water Conservation and GC3 Agriculture & Soils Working Group | Need to integrate this information with the Ag and Soils Working Group Soil health is a key concept that needs to be considered across other groups |
| Cynthia Rabinowitz | Executive Director, Northwest Conservation District | There is a lack in soil science expertise among younger professionals that needs to be addressed We need to re-strengthen the soil science program at UConn to ensure that expertise is available in the future |
| Jane Brawerman | Connecticut River Coastal Conservation District | none |
| Mary Rose Palumbo | Southwest Conservation District | none |

AGENDA & NOTES

Welcome and Announcements

- Welcome, announcements, and roll call presented by Leslie Kane

Agenda Item: Informational Presentation

Coastal Zone Survey, Subaqueous Soils, and the Relationship of Tidal Wetlands to Blue Carbon

Debbie Surabian, State Soil Scientist, USDA-NRCS

- NRCS is the lead federal agency for soil surveys
- Subaqueous soils (SAS) include both subaqueous and submerged soils
- Subaqueous soil data collection is intensive; topobathy LIDAR and side-scan sonar are both key tools; soil core samples are also collected
- NRCS is part of an interagency working group on ocean and coastal mapping

- Ecological site descriptions include information on soils, landforms, geological, and climate data; sites produce distinctive kinds, amounts, and proportions of vegetation
- SAS data can be hard for users to understand and NRCS helps with the interpretation (e.g. soil suitability for hard clams, Eastern oysters, eelgrass beds, moorings, dredge placement, and much more)
- Blue carbon is associated with saltmarshes and seagrass meadows; they store lots of soil organic carbon
- Annual carbon sequestration rates for blue carbon habitats per unit area are higher than terrestrial forest
- There is no national standard for collecting, analyzing, and reporting soil organic carbon
- For blue carbon it is important to model by marsh geomorphic settings and not on average carbon density
- A National Blue Carbon Assessment is underway—hopes to standardize protocols and provide defensible data
- Green carbon is associated with freshwater inland wetlands
- Connecticut defines inland wetlands based on soil types
- For green carbon, a national soil health assessment is underway; soil health is the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals and humans
- Much of the SAS and terrestrial soils data can be found on the web soil survey; a web app is also available; Connecticut's soil survey is the most downloaded soil survey in the country!!
- Questions and Answers
 - How does NRCS interact with USGS on mapping? *There was some early synergy, but less more recently; improvements are welcome.*
 - Are there estimates of carbon stocks remobilized? *No. There remain huge data gaps in this area.*
 - Comments: there is some release of carbon data for freshwater wetlands; the SAS survey has not been progressing as rapidly as it should—the working group could make recommendations in this regard.
 - Are there currently any summarized numbers for SAS/blue carbon storage? *No, but it could be summarized from existing soils data considering many variables*

Next steps

- The concept of soils health needs to be shared with other GC3 working groups
- Team should continue to populate the documents (Table of Contents) under development
- **Next meeting date:**
Friday, May 15th, 1:00-3:00 pm;
Topic One: Presentation on Carbon Sequestration in Coastal Marshes
Speaker: Dr. Beth Lawrence, UConn

GC3 WETLANDS SUB-WORKING GROUP

Meeting Date: 05/01/2020

Topic Two: Making its Mark: the Fate and Transport of Nitrogen
and Carbon in the Long Island Sound Estuary

Speaker: Penny Vlahos, UConn

Location: Virtual

Public comments:

Noted Above (Public Attendee Table)

NOTE: Slides/presentation will be made available on GC3 web page: www.ct.gov/deep/gc3