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

Meeting Date: February 4, 2020
Meeting Time: 9:00 a.m.
Meeting Location:
Connecticut Forest and Park Association
16 Meriden Road
Rockfall, CT
ATTENDENCE

<table>
<thead>
<tr>
<th>Working Group Member</th>
<th>Title</th>
<th>Organization</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alicea Charamut</td>
<td>Executive Director</td>
<td>Rivers Alliance of Connecticut</td>
<td>Y</td>
</tr>
<tr>
<td>Mike Dietz</td>
<td>Extension Educator</td>
<td>UConn/Institute of Water Resources</td>
<td>Y</td>
</tr>
<tr>
<td>Virginia DeLima</td>
<td>Retired</td>
<td>USGS (retired)</td>
<td>Y</td>
</tr>
<tr>
<td>Erik Mas</td>
<td>Environmental Engineer</td>
<td>Fuss and O’Neill</td>
<td>Y</td>
</tr>
<tr>
<td>Lynn Werner</td>
<td>Executive Director</td>
<td>Housatonic Valley Association</td>
<td>Y</td>
</tr>
<tr>
<td>Shelley Green</td>
<td>Director of Conservation</td>
<td>The Nature Conservancy</td>
<td>Y</td>
</tr>
<tr>
<td>Kirt Mayland</td>
<td>Attorney/President</td>
<td>Reservoir Road Holdings &amp; Mayland Energy</td>
<td>Y</td>
</tr>
<tr>
<td>Jason Vokoun</td>
<td>Professor and Dept. Head</td>
<td>UConn Natural Resources and the Environment</td>
<td>Y</td>
</tr>
<tr>
<td>Kelsey Wentling</td>
<td>River Steward</td>
<td>Connecticut River Conservancy</td>
<td>Y</td>
</tr>
<tr>
<td>Bill Dornbos</td>
<td>Executive Director</td>
<td>Farmington River Watershed Association</td>
<td>Y</td>
</tr>
<tr>
<td>Laura Wildman</td>
<td>Director, NE Office, Ecological Engineering</td>
<td>Princeton Hydro</td>
<td>Y</td>
</tr>
<tr>
<td>Eileen Fielding</td>
<td>Center Director</td>
<td>Audubon Connecticut (National Audubon)</td>
<td>Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associated Staff</th>
<th>Title</th>
<th>Organization</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Jacobson</td>
<td>Bureau Chief</td>
<td>DEEP, Bureau of Natural Resources</td>
<td>Y</td>
</tr>
<tr>
<td>Pete Aarrestad</td>
<td>Director</td>
<td>DEEP, Bureau of Natural Resources - Fisheries Division</td>
<td>Y</td>
</tr>
<tr>
<td>Cary Lynch</td>
<td>Research Analyst</td>
<td>DEEP, Bureau of Energy and Technology Policy – Office of Climate Change Technology &amp; Research</td>
<td>N</td>
</tr>
<tr>
<td>Susan Peterson</td>
<td>Environmental Analyst 3</td>
<td>DEEP, Bureau of Water Planning and Land Reuse – Water Planning &amp; Management Division</td>
<td>Y</td>
</tr>
</tbody>
</table>
AGENDA & NOTES

Welcome and Announcements

- Welcome and announcements presented by Rick Jacobson
- Introductions of Rivers Sub-Working Group (SWG) Members

Agenda Item(s)
Facilitated by Alicea Charamut, Rivers SWG Chair and Executive Director, Rivers Alliance of Connecticut

- Presentation/Refinement of the Charge
  - Existing Resources
    - Governor Lamont's Executive Order 3
    - 2011 CT Climate Preparedness Report (Preparedness Report)
    - 2018 Building a Low Carbon Future for Connecticut (Mitigation Plan)
    - Working and Natural Lands Working Group OUTLINE OF APPROACH
  - Scope of Work
    - Review of the 2011 Preparedness Report and assess what has been completed, and what has not.
    - There was discussion about where/which Sub-Working Group (SWG) will address landscapes such as riparian forests? The expectation is that each group should explore all of the issues they believe are related to their specific role and the reports will be melded together. This may include joint working meetings of multiple SWGs.
    - There was further discussion of how deep our discussions should go on Carbon. Should we be focusing on carbon sequestration or any and all aspects in which climate impacts our water resources? In terms of ‘mitigation’, the SWG should consider opportunities to reduce GHG emissions through changes in the way we incentivize rivers as a source of renewable energy (i.e. - create economic benefits to operation of Colebrook Hydro).
    - Topic should not be limited to “rivers” but take all inland waters into consideration.
    - Build on, but don’t be constrained by, the objectives identified in the 2011 Preparedness Report.
    - The challenge to the SWG is to craft a report composed of SMART objectives, with an emphasis on quantifiable, time limited outcomes and responsible parties.
  - Problem Definition
    - Many of the predicted climate change consequences identified in the earlier reports are happening now and we are dealing with the consequences. However, many of previously identified priority areas have not been addressed. Suggest we focus on those items that seem to be happening faster than expected and to which we still don’t have solutions.
    - Infrastructure & Natural Resources (ie. - Working & Natural Lands) – Seems that these topics have been put into separate subsections (in draft report outline). Can’t really separate these things because they are interrelated.
**Audience**

- All those who have the authority, opportunity and responsibility for taking action on the objectives to address threats to rivers, in the near and long term.
- There was much discussion about an inability to make progress on this issue until the public can get behind the necessity to address climate change impacts and mitigation. There is a need to put more energy into social science and communication aspect. For example, need to better communicate info to public (without scaring them) about how climate changes impacts are already affecting them. Need to make info relevant to their daily lives and experiences.

**NEW AGENDA ITEM) Preliminary Identification of Important Characteristics of Rivers – Relative to Climate Change**

- There was a brainstorming session where threats to inland rivers as related to climate change were identified.
- This brainstorming list will be compiled and refined by Alicea Charamut and included with the materials for the next meeting.
- Approach – The issues can be broad. How do we approach holistically? The group decided to use an Ecosystem Services Approach. Jason Vokoun will send information about this approach for the group to review before the next meeting.

**Identify Preliminary Information Needs**

- Indirect climate change threats
- "Barriers" to response
- Critical info gaps (of which we are currently aware)
- What is already working well (and how to speed up process)?
- With regard to rivers and climate change, what assets and human possessions are at risk?
- Need to update “vulnerabilities” list
- Coastal area (as opposed to inland areas) are way ahead on identifying this type of info
- Insurance industry is probably going to be a big player in decision making
- Some suggested sources of information:
  - (Existing) Hazard Mitigation Plans developed at regional level already have a lot of info with regard to current and future climate predictions
  - NOAA Atlas 14
  - Richard Palmer (UMass) – Has projected of impacts on ecosystems (eg. – plant populations, etc.)
  - USGS – Flow regime projections? (Up-to-date? Regional?)
  - USFWS – Silvio O. Conte National Fish & Wildlife Refuge (Policies with regard to land acquisition, etc.)
  - List of CT industries at risk? (eg. – water utilities, agriculture, etc.)
• CT population stability?

• Check other plans that have already been done (e.g. – State Water Plan) so that don’t duplicate efforts that already have been done
  o Vulnerable populations along rivers? Need to keep in mind Environmental and Social Justice issues
  o Need to calculate impacts of developments with regard to “thermal loading” from thermodynamic infrastructure (such as impervious surfaces, etc. - so can "talk numbers")
  o What methods of communication are effective and how to implement?

• Summary of Work to Date
  o Reviewed the work completed relative to the GC3, Subcommittees and Working Groups to date, including the structure of the GC3, and the 2011 Preparedness Report

• Expected Deliverables (reference: draft table of contents)
  o Draft Outline provides scope and deliverables. These can be refined.
  o Intended to be a guide or “road map” for SWG regarding where we need to end up. However, not meant to constrain SWG.

• Develop Meeting Schedule
  o Alicea Charamut will try to find best meeting dates with "call in" option
  o Considerations:
    • Include a couple of evening meetings
    • Try to meet at different locations around State
    • Since transportation is a “driver” of climate change, consider one whole day meeting instead of two half day meetings
  o Consider doing on-line “Zoom” meetings. Considerations:
    • Public is welcome to all meetings, so may not work from that perspective (eg. - Can public “Zoom” in?)
    • Might be useful for smaller working groups or those who would like to join meeting remotely
    • Some find “Zoom” distracting and not always productive
  o Meeting in-person is beneficial to discussion
  o Discussion about how to share meeting documents and other communications – Alicea Charamut offered to create a Google Docs folder in order to share documents.

• Proposed Timeline
  o Members were directed to review handout "Working and Natural Lands Working Group, and Sub-Working Group (SWG) Schedule” with the understanding that the timeline will be refined as work progresses. However, the work of the Rivers SWG essentially needs to be completed by early June 2020.
  o Need to meet consistently. Also, look for overlaps with other SWGs and interact, as necessary.
Next steps:

- Develop Meeting Schedule – Alicea Charamut will review online and paper polls, follow-up with individual members as needed, and have dates available within a week.

- Review “Ecosystem Services Approach to Threat Assessment” – Links to online sources to be provided by Jason Vokoun

Public comments

- No members of the public were present and no other public comments were received.

NOTE: Identify if slides or presentations are available on GC3 web page: www.ct.gov/deep/gc3

- No slides or presentations