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

Meeting Date: June 3, 2020
Meeting Time: 6:00 – 8:00 pm
Meeting Location: via ZOOM

ATTENDANCE

Working Group Member	Title	Organization	Present
Alicea Charamut	Executive Director	Rivers Alliance of Connecticut	Y
Lynn Werner	Executive Director	Housatonic Valley Association and Rivers Alliance BOD	Y
Eileen Fielding	Center Director	Sharon Audubon (National Audubon Society)	Y
Kirt Mayland	Attorney/President	Reservoir Road Holdings & Mayland Energy	Y
Bill Dornbos	Executive Director	Farmington River Watershed Association	Y
Andy Fisk (primary)	Executive Director	Connecticut River Conservancy	Y
Kelsey Wentling (alternate)	River Steward - Connecticut		N
Jason Vokoun	Professor and Dept. Head	UConn Natural Resources and the Environment	N
Mike Dietz (primary)	Extension Educator	UConn/Institute of Water Resources	Y
Mike O'Neill (alternate)	Associate Dean	UConn College of Agriculture, Health and Natural Resources	N
Laura Wildman	Director	Princeton Hydro - NE Office, Ecological Engineering	Y
Virginia de Lima	Retired	USGS (retired) & CT Water Planning Council	Y
Shelley Green	Director of Conservation	The Nature Conservancy	Y
Erik Mas	Environmental Engineer	Fuss and O'Neill	N

Associated Staff	Title	Organization	Present
Rick Jacobson	Bureau Chief	CT DEEP, Bureau of Natural Resources	Y
Peter Aarrestad	Director	CT DEEP, Bureau of Natural Resources - Fisheries Division	Y
Susan Peterson	Environmental Analyst 3	CT DEEP, Bureau of Water Planning and Land Reuse - Water Planning & Management Division	Y
Cary Lynch	Research Analyst	CT DEEP, Bureau of Energy and Technology Policy - Office of Climate Change Technology & Research	Y (ZOOM support)

Members of Public	Affiliation/Organization	
Margaret Miner	Rivers Alliance of Connecticut (consultant)	Y
Mary Rickel Pelletier	Park Watershed	Y
Martin Mador	South Central River Advocates and Rivers Alliance of CT BOD	Y
Jonathan Lee	City of New Haven and Yale School of Forestry	Y
Brian Basso	GC3 and Yale School of Forestry	Y
Michelle Maitland	Town of Groton – Department of Public Works	Y
Mary Mushinsky	South Central River Advocates and CT General Assembly - State Representative	Y

AGENDA & NOTES

Welcome, Announcements, and Roll Call

Alicea Charamut, Rivers Alliance

Charamut asked Rivers Sub-Working Group (SWG) members to introduce themselves for new members of the public in attendance. Members of the public also introduced themselves.

Aarrestad noted that Erik Mas had a last minute conflict and might not be able to attend.

Charamut said constructive comments from the public are welcome. It is fine to join the discussion, as long as not disruptive. Can also use Chat (ZOOM function) to comment. Charamut makes an effort to pull relevant comments from Chat. Opportunity for public comment also provided towards the end of the meeting.

Agenda Item(s)

Facilitated by Alicea Charamut, Rivers Alliance

- **Evaluating progress on 2011 Plan recommendations**

Charamut asked if anyone had questions on the spreadsheet she distributed since the last meeting. The spreadsheet was developed by Eric Hammerling (Forests SWG) to help evaluate the recommendations in the 2011 climate change plan. Per questions asked, Charamut clarified that members should only fill out the sections for items with which they are familiar, otherwise leave blank. Feel free to contact her with any questions. Charamut would like to receive completed spreadsheets by next meeting (June 25).

- **Strategies, Actions and Outcomes – [Discussion and Team reports](#)**

For the benefit of members of the public who are new to the discussion, Charamut explained that the Rivers SWG has divided into four teams to evaluate rivers via different Ecosystem Services. (Charamut displayed a copy of the spreadsheet which can be viewed via this link: <https://drive.google.com/file/d/15Zgdzd81yezMUj9arZJYRB4Qhe87sRfN/view>.) The Rivers SWG is using this approach to help think through the evaluation process. It will also help in terms of looking at adaptation measures and what progress has been made (or not) since the last climate change report.

Charamut informed members of the public that there is a link to the Ecosystem Services spreadsheet in both the agenda and meeting minutes. She will also ask to get the link posted separately on the State website, along with the meeting agendas, etc.

The Rivers SWG has been reviewing the work that each Ecosystem Services team has accomplished. This discussion picks up where it left off last time ...

Cultural Services

Charamut noted that the team focused initially on recreation and ecotourism because it touches the majority of the threats common to the other services within this group and it is how the majority of the public interact with our inland waters.

With regard to impacts on rivers, changing precipitation patterns popped up in all categories and touched almost everything. The balance between instream and out-of-stream water uses particularly needs to be examined. One of the strategies identified to help people understand the importance of rivers is to commission a study on the economic value of recreation and ecotourism. Charamut also ran through other potential strategies.

Negative perceptions that people have of rivers and water resources is also an issue. Need to find ways to move forward to change perceptions such as engaging members of the public in watchdog efforts (ie. – water quality monitoring, etc.). Charamut asked for other ideas. Werner pointed out that a barrier to water monitoring can be “quality control”. However, CT DEEP has a robust macroinvertebrate testing program that is popular. Fielding noted that not everyone enjoys this activity. Werner added that, in MA where there is fear (of the Housatonic River) due to PCBs, they have installed canoe paddling access sites which have increased interest in river. Dornbos commented that MA provides grants for water quality monitoring which encourages more groups to pursue this activity.

Peterson noted resource issues that make this challenging. For example, one CT DEEP staff person who also has other duties, oversees the volunteer monitoring program. As a result, CT DEEP is not able to do as much outreach, even if just for educational purposes. Fielding agreed that increased staffing at the State level is needed. Dornbos noted that MA has made greater funding for the environment a priority.

De Lima pointed out that success of civilian programs depends a lot on what they are monitoring and the degree of precision required.

Public comment:

(Comment) Mushinsky – There is not much going on around New Haven in terms of monitoring. Her group had been thinking about doing bacteria sampling and taking the samples to a lab and having them analyzed, especially since the State is not doing much bacteria monitoring in that area. Recently, her group received a grant to do bacteria monitoring. They are also working with Save the Sound (under Unified Water Study for embayments) on harbors. Bacteria levels are important with regard to recreation.

(Response) Charamut – Agreed that bacteria levels impact recreation.

Fielding suggested a possible barrier is not being able to do comprehensive testing. (Based on more limited testing) people may interpret water as safe or not safe. This may pose a liability issue. Charamut noted that the Connecticut River Conservancy (CRC) has done a good job with regard to providing water quality information and presenting how to interpret it in balanced way on “Is It Clean?” She asked Fisk if the CRC website still exists? Fisk said it does and noted that the information provided is in both English and Spanish. Charamut said that although it is challenging, it is important to get the information out there in a form that people can understand. This includes interpretation of water quality assessments, such as waterbodies that are identified as not meeting Water Quality Standards. Perhaps can work with CT DEEP environmental education programs (eg. – CT DEEP Kellogg Environmental Center) to help interpret information?

Peterson agreed that environmental education is critical but these resources always seem to be among the first things to get cut from a budget. She also offered a reminder that the Draft 2020 Integrated Water Quality Report is currently out for public comment. (Public info meeting – June 5; Comments due June 19). There are also challenges with regard to monitoring in terms of water quality monitoring done weekly for State bathing beaches (during swimming season) versus other waterbodies that may only be monitored every two or three years. De Lima added that there are also challenges with regard to spatial variables (ie. – monitoring downstream vs. upstream). Charamut emphasized that it is important to not to “write off” a waterbody, even if water quality not good.

Discussed having more watershed based conferences and fairs but need to incorporate post-pandemic-world considerations.

Public comment:

(Comment) Mushinsky – Her group usually does three festivals per year but they’ve all been cancelled this year. Instead, they are trying to do other activities with individual families, such as canoe trips. So, they are segmenting the population but are able to organize with social media.

(Response) Fielding – It’s lucky that a lot of (river) recreation (such as canoeing) is done in twos or threes.

(Response) Werner - This is a great opportunity to become more organized and get information out to people in better way. There are many other great spots out there to recreate, besides the most popular locations. We need to make information more easily accessible.

(Response) Charamut – Perhaps River Alliance’s “Water Trails” page can be used? Perhaps it could be turned into an app?

Charamut reviewed other Cultural Services pieces. Aquatic invasives (eg. - rooted aquatic vegetation) and algal blooms impact recreation. Climate Change influences these by increasing stormwater runoff and nutrients available that feed these plants. There is a state funding mechanism through the “boating stamp” (aka Aquatic Invasive Species Stamp). Stormwater loading ties into this issues. Strategies to address include Low Impact Development (LID) and Green Infrastructure (GI).

Extraction and diversion also impact recreation, if a river runs dry through drought or over-extraction. The State Water Plan did not quite address this piece (ie. – make it illegal to dry up streams).

Shifting ranges of biota also affect Cultural Services. We get attached to species, as they provide a “sense of place”. However, there may have to be some shifts with regard to warmwater species, etc. For example, CT DEEP has been talking about diversifying the fish it raises in its hatcheries. Arrestad asked Charamut to explain the double asterisks (** in spreadsheet) especially where they apply to fish. She said it pertains to the 2011 plan and identified adaptations. Arrestad noted that there is lot on the list that piques the interest of the Fisheries Division. However, we must also consider human behavior and how some people will react to changes (eg. – trout fisherman). There has also been talk about protecting coldwater species. Rather than “throw in the towel” (and just accept that shifts to warmwater species are inevitable), we need to take action of some sort. For example, it would be interesting if we could develop strains of trout that are more tolerant of warm water as a potential mitigation strategy. Charamut also pointed out the issue of loss of habitat for native species.

(Charamut noted that she has been trying to capture Chat comments and linking them to what seems like the best spot in spreadsheet.)

Supporting Services

Wildman picked up from where her team left off last time. She noted that the “biggest take home point” is that we need more funding. States around us are doing a better job than we are, such as MA with its Division of Ecological Restoration (DER) and NY with its “Restore Mother Nature” initiative. We need to investigate how these states are able to do these things and try to do something similar in CT.

Wildman provided a quick recap of other things her team discussed, including:

- Nature based solutions. This is challenging because of current pandemic. However, we need to emphasize that these (solutions) also create jobs.
- Riparian buffers, including agricultural buffers

- River flows
- FEMA's current flood rating system
- Sustainable CT
- Dam removal program needed within CT DEEP, to reduce the burden of dams that are no longer serving a purpose and to educate landowners about instream barriers.
- Replacing culverts with better design structures. For example, when FEMA funds (emergency) replacements, they need to allow use of a better design rather than just replacing the culvert with same, existing structure.
- Incentivize disconnection of impervious surfaces, such as they are doing in Philadelphia
- More USGS gages needed, especially with regard to (measuring) sediment
- Need to direct state resources towards more high quality rivers (not just impaired rivers)
- Investigate other forms of renewable energy such as solar roads

Wildman emphasized that it's important to use existing programs, so we don't reinvent the wheel, such as Vermont's "Resilient Corridors" program and MA DER's river systems restoration program.

Public comments:

(Comment) Mushinsky – Suggests drawing up rough proposal, in case it can be used in (potential, upcoming) Special Session or next Congressional stimulus package. The Forestry SWG is already putting something together along those lines. This would be helpful for drafting legislation - including ways to employ people and provide job restoration to the state.

(Response) Werner – Are you suggesting we have a package that's ready to go?

(Comment) Mushinsky – Yes, some are thinking about stimulus package like the CCC.

(Comment) Rickel Pelletier – The Park Watershed has been working with other groups regarding how important forests are along urban river corridors. There is not enough funding to manage this effort. Help would be greatly appreciated.

(Response) Wildman – We also have included something in the spreadsheet about environmental justice, regarding identifying sensitive communities in urban areas. In light of everything going on right now, this is especially important.

5 MINUTE BREAK

Green – Thanked Wildman for the Supporting Services team recap and emphasized the value of brainstorming. This can help the group can come up with five things that are most valuable. A long list can be difficult. When there is time, she would like to bring up "place-based strategy" (a complimentary strategy) of places that have already been identified as resilient and connected to the freshwater network. Charamut asked if there is existing data. Green replied, yes. Wildman agreed that it's important that it be a science driven process.

- **Conflict Resolution and Prioritization**

Charamut said that the Rivers SWG needs to start thinking about making recommendations and writing its report. She noted we have a good foundation. However, although it seems like we have a lot of material, there is also a lot of repetition. She suggests making a matrix, similar to Table 1 in the 2011 plan. We can then identify the “low hanging fruit”.

Teams should meet one more time and should discuss public comments and add them where appropriate. Members of the public can review and provide additional comments.

Charamut said she would try to put together as much as possible before next meeting. We have some conflict resolution to address.

Public comments

Rickel Pelletier – She noted that she had typed most of her comments into the Chat box. Her biggest question and concern is about representation of urban rivers on this group and within the established community. She is very interested in Mushinsky’s proposal about the need for cost effective solutions and partnerships. Going back to Green’s comments ... If there were to be a spreadsheet about the healthiest streams, perhaps there also needs to be a spreadsheet regarding urban streams and the impacts that upstream communities (eg. – West Hartford) have on downstream urban communities (eg. Hartford)?

Mushinsky – She said that she works mostly with urban river folks, too. On the immense list of “things to do”, we need to invite more urban people to participate. She said she uses urban kids as interns. She also noted that many urban kids don’t know how to swim because they are afraid of the water and drowning. We need to address this issue. These kids will be managing our (natural) resources, eventually. She respects all the work that has been done but with COVID-19 and the need to restore the economy, this might be an opportunity for job creation. It’s important to feed information to people who will be looking for job ideas, and create a “package” for members of Congress and the Governor. They are not just looking at resources but are also looking at job creation possibilities.

Fielding agreed that this sounds very worthwhile and closely allied. She wondered who would put these packages together and who should receive them?

Mushinsky said there are volunteer groups working on these things already. Get in touch and run ideas by them.

Fielding said she doesn’t have capacity, herself, but she could bring up the idea with other staff within National Audubon. They have an interest in forests and rivers but will want to understand who might already be doing things.

Rickels Pelletier – Hartford has been acknowledged as a “bird treaty area”. The issue of forests, birds and urban areas is important ... and job creation is very relevant.

Mushinsky – Sometimes things happen spontaneously ... Sometime you “win” simply by being “ready”. She shared a story regarding participating in a (Congressional) discussion where a project got cancelled and they needed another project worth \$1 million to put in its place. Mushinsky had a project that was ready to go. It got plugged into the budget and they got the money for the project. If have projects that are ready to go, then you might be able to sell someone on the idea.

Charamut noted that there are many different skill sets within the group. If anyone can give good specifics on how to pitch ideas, specific suggestions would be welcome.

Wildman said that during the 2008 recession, a stimulus package was put together and it was called the “green jobs” initiative. In anticipation that something similar might happen now, Princeton Hydro has already started a list of potential projects, so that they will be ready with summaries and budgets.

Peterson suggested a package to help MS4 communities with LID and GI.

Wildman pointed out that (CT DEEP) Supplemental Environmental Project (SEP) funds are also a potential sources of money. However, they need to be better managed and directed. Currently, the money is distributed in a less-than-organized fashion.

Rickels Pelletier - She noted that SEP funds paid for the Park River watershed based plan. She said we need a “revenue shed” plan. For example, a lot of utilities pay to discharge into the river but downstream communities do not see a benefit.

Next Steps and Adjourn

Charamut said that the Ecosystem Services teams should meet again before the next Rivers SWG meeting. Teams should flesh out any remaining areas, see how public comments can be incorporated and determine if there is anything they might have missed. She noted that the SWG will continue to take and incorporate public comments throughout the process.

Next, we need to prioritize and determine how to handle conflicting recommendations.

De Lima reminded all that the spreadsheet was just a tool to organize our thoughts. There is also the report outline. How we choose to organize the information we’ve identified may help us to decide how to organize the report.

Charamut said it may be hard to categorize things under the Ecosystem Services scheme. She suggested we look at how things are presented in the 2011 plan. What works and what needs to be improved? Then, decide on appropriate format.

Wildman asked for a reminder about filling out the 2011 plan spreadsheet and other assigned homework.

Charamut said she would send out instructions to the Rivers SWG.

The next meeting will be June 25, 2020; 10:00 am – 12:00 noon.

Adjourn: ~ 8:00 pm