
**Governor's Council on Climate Change (GC3)
ADAPTATION & RESILIENCE SUBCOMMITTEE MEETING
MEETING MINUTES**

Meeting Date: December 7, 2020

Meeting Time: 2:30 - 5:00 pm

Meeting Location: Zoom

RECORDING

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ATTENDANCE

Attendee	Title	Organization	Present
Claire Coleman	Undersecretary, Secretary's Designee	Office of Policy & Management	√
Matthew Fulda	Executive Director	Connecticut Metropolitan Council of Governments	√
Kevin Grigg	President and CEO	Fuss & O'Neill	√
Kayleigh Royston		DOAG	√
Curt Johnson	President	Save the Sound	√
George Kral	Town Planner	Town of Guilford	√
Alexandra Daum	Deputy Commissioner/ Commissioner's Designee	Department of Economic & Community Development	√
James O'Donnell	Executive Director	UConn, Connecticut Institute for Resilience & Climate Adaptation	√
Lori Mathieu	Public Health Section Chief	Connecticut Department of Public Health	√
Frogard Ryan	Executive Director	The Nature Conservancy	√
Garrett Eucalitto	Deputy Commissioner (Robert Bell's Designee)	Department of Transportation	√
Katie Dykes	Commissioner	Department of Energy & Environmental Protection	√
Rebecca French	Director of Office of Climate Planning	Connecticut Department of Energy and Environmental Protection	√
Phone Participant 1			√
Alec Shub			√
Alanis Allen			√
Dave Kozak			√
Jean Cronin			√
Steven Walleth			√
Amy Paterson			√
Ralph Jones			√
Rick Newton			√
Carol Youell			√
Brian Thompson			√
Edith Pestana			√
Huan Ngo			√
Denise Savageau			√
Jill Oberlander			√
John Truscinski			√
Mary-Michelle (Mikey) Hirschhoff			√
Robert Bell			√
Goudarz Molaei			√
Eric Hammerling			√
David Sutherland			√
Alex Rodriguez			√
James O'Donnell			√
Mary-beth Hart			√

Adaptation & Resilience Subcommittee

December 7, 2020

Joseph Wraithwall			√
Susan Barney			√
Melinda Tuhus			√
David Murphy			√
Cary Lynch			√
Nathan Frohling			√
Todd Berman			√
Jocelyn Mullins			√
Aaron Budris			√
Susan Masino			√
Amy Velasquez			√
Katie Lund			√
Maggie Adair			√
Patricia Taylor			√
Orlando Velazco			√
Laura Hayes			√
Robert LaFrance			√
Mark Mitchell			√
Laura Bozzi			√
Martha Page			√
Tim Shea			√
Suzi Ruhl			√
Kathleen Dorgan			√
lynne bonnett			√
Lynn Towill			√
Laura Cahn			√
Ruth Canovi			√
Mario Garcia			√
Anthony Cherolis			√
Lisa Hayden			√
Samantha Dynowski			√
Joanna Wozniak-Brown			√
Del McCloe			√
Connie Manes			√
Mike Morrissey			√
Diane Hoffman			√
George Bradner			√
Holly Lalime			√
Kai Starn			√
Hallie Metzger			√
Brenda Bergeron			√
AARON GOODE			√
Bonnie Potocki			√
James Albis			√
Max Teirstein			√
Paul Hearn			√
sharon lynch			√
Diane Mas			√
Steve Almeida			√
Gannon Long			√
Lilian Ruiz			√

AGENDA & NOTES

Welcome and Announcements

Commissioner Katie Dykes opened the meeting with a rollcall. She then outlined the plan for the meeting which includes:

- Review and discussion of the Governor’s Council on Climate Change (GC3) process and timeline, a discussion
- Discussion of working group Adaptation and Resilience recommendations
- Discussion on Adaptation and Resilience Subcommittee recommendations

The meeting will focus on recommendations from the following working groups:

- Science and Technology
- Infrastructure and Land Use
- Public Health and Safety
- Financing and Funding Adaptation and Resilience

Rebecca French provided an overview of the GC3 process and timeline. The working groups worked on reports starting in January of 2020 and after a 30-day public review period, finalized reports that are posted on the GC3 website:

<https://portal.ct.gov/DEEP/Climate-Change/GC3/GC3-Working-group-reports>

The GC3 is split into two subcommittees: The Adaptation and Resilience Subcommittee and the Mitigation Subcommittee. The Subcommittees are meeting to review the recommendations of the working group reports. This meeting is for the Adaptation and Resilience Subcommittee and the Mitigation Subcommittee will be meeting on December 14th. The subcommittees will be focusing on reviewing recommendations that will begin to be implemented in the near-term: early 2021 to early 2022.

Reviewing recommendation summary list

(DRAFT FOR DISCUSSION SHARED WITH SUBCOMMITTEE AHEAD OF THE MEETING ATTACHED TO MINUTES)

Buildings Sector

1. Address Health & Safety Barriers to the Adoption of Energy Efficiency.

- Lori Mathieu: The language “indoor health barriers” should be changed because we do not view those things as being barriers. Instead they are “health issues”.
- Katie Dykes proposed making a change to the wording “indoor health issues that are barriers to efficiency upgrades”

Infrastructure and Land Use

2. The GC3 Subcommittee on Climate Adaptation will evaluate and provide updates on the implementation of strategies and actions pertaining to climate adaptation and resiliency

Alternative:

Develop a governance structure to facilitate oversight, implementation of strategies and actions pertaining to climate adaptation and resiliency.

- Katie Dykes explained that throughout the working group reports, there are a number of places that recognize the need for near term action in establishing governance structures for oversight or task forces and a number of them are working to achieve similar things. She recommends keeping the top line as a recommendation and then highlighting bullets a, b, c, d, and e, as specific planning and analytical efforts that need to be launched. This leaves

flexibility for discussion about what the right type of governance structure would look like to oversee these various items.

- James O'Donnell agreed that structure is needed
- Matthew Fulda agreed, saying that rather than trying to put five different recommendations that are relatively similar in terms of mapping and analysis, it makes sense to lump them together as initial scoping items for whatever the structure ends up being.
- Brenda Bergeron commented on bullet 'a'. Municipal planning and regional planning are better than statewide evacuation routes. It can get messy to tell people what to do from the state level. There is already an emergency support function transportation group working on this. It might be good to change the wording around this.
- Matthew Fulda responded that it might be good to modify the wording. The working group was aiming for the recommendation to convey a need for standardizing evacuation routing and regulation planning across the entire state.
- Kevin Grigg agreed that the recommendation needs to be clearer that the intent is for planning at the local level.
- Katie Dykes proposed using the recommendation version "Alternative for #2"
- Kevin Grigg and Matthew Fulda agreed

3. Establish Connecticut community resilience program.

- Katie Dykes expressed that this is a recommendation that there was a lot of consensus on
- Nathan Frohling and Frogard Ryan of the Nature Conservancy, both expressed support for recommendation 3

Public Health and Safety

Recommendations 4-7

4. Develop a coordination framework for public health and safety priorities with a focus on the intersection of health equity and climate impacts.

5. Prepare Connecticut for vector-borne illnesses.

6. Prepare public and private drinking water systems for climate impacts.

7. Plan for the emergencies related to the impacts of climate change and ensure the incorporation of vulnerable populations into those planning processes.

- Curt Johnson noted that a recommendation regarding increased stormwater runoff creating more bacterial exposure at beaches is not included in the list
- Rebecca French responded that there is a recommendation that refers to that but it may have been included in the list for the Working and Natural Lands working group. This highlights that there are overlapping recommendations and that there should be a process for identifying which recommendations are overlapping between different working groups.
- Brenda Bergeron stated that critical transportation needs could be a functional need issue, but it could also be an issue of not having a car or living in an area where there is not much transportation. This concept is being folded into the state evacuation response framework, which is positive.
- Curt Johnson stated that our bus systems are all designed to bring people downtown and this brings up the question, in a state of emergency, is the right location for shelter downtown? A critical question is whether this transportation system can be used to transport people to a different location in a case of emergency.

Financing and Funding Adaptation and Resilience

8. Implement a 40% equity funding commitment.

- Katie Dykes expressed that this is a great commitment. It will need some more methodology and engagement with communities about how to define the metrics of an equity impact.
- Curt Johnson supports the 40% equity funding commitment. There are some

recommendations in the working group report that are not listed here including:

- A recommendation for specific funding ideas; general application bonds at \$25 million
- A definite conversation about nature-based solutions
- Consideration of a flush tax as a source of funding
- Katie Dykes responded that these might have been recommendations that did not receive full consensus from the reviewers. Maybe one way to frame them would be to say consider or evaluate funding gaps and revenue options that could address those gaps.

17. Utilize state general obligation bonds under an expanded microgrid and resilience grant and loan program to fund adaptation and resilience programs and projects.

- Curt Johnson noted that number 17 discusses the concept of general bonding but does not mention nature-based solutions. If we are going to talk about general obligation bonds then it should be expanded. Another important concept is the idea of wider eligibility for any funding. It is important to broaden the number of entities that are eligible for such grants and secondly, the potential for giving grant programs like this to a third party.
- James O'Donnell agreed that we need to promote the notion that the state should be expected to pay through bonding for projects in the near-term and point 17 does not really bring this to attention, it should be farther up. Multiple benefits should be a priority for spending funds.
- Frogard Ryan and Nathan Frohling both agreed that these are important items that need to be included and that this item, 17, is one of the top priorities of the Nature Conservancy.
- Claire Coleman flagged the current bonding limitations of the state given the current deficit and the statutory debt issuance cap, and difficulty of committing to specific bond funds at this time.

9. Develop “project pipeline” for state and federal funding opportunities.

- Curt Johnson: The project pipeline is very important. A think tank will probably not be totally effective at identifying every good project. It is important to get projects to the permitting stage of design, which is different from identifying projects.
- Lori Mathieu agreed that it is very important to have a pipeline of projects ready, especially in the case of another stimulus.
- George Bradner: It is a scramble to go out searching for projects when funding becomes available. There needs to be a funnel of projects in different stages.
- Katie Dykes commented that she would highlight the recommendation related to ownership, operation and maintenance of reliance structures under Infrastructure and Land Use (recommendation 2e) as an important near-term item related to these financing discussions.
- Curt Johnson mentioned several concepts that were included in the original report but did not make it onto this list:
 - To support a more enhanced community engagement process with low- and moderate-income communities
 - Support for environmental justice efforts and organizations in the state
 - Empowering community organizations with the project administration and grant administration capacities they would need to take on these projects
- Claire Coleman added engagement of philanthropic organizations which could fund some of those community outreach opportunities, before asking the state for money
- Katie Dykes responded that some of this engagement could be included under recommendation 8
- Curt Johnson asked if there could be inclusion of something about potential state partnering

20. Convene Connecticut's community foundation and philanthropic leaders on addressing climate change.

- Kevin Grigg expressed that the private sector should be prevailed upon to help fund research that addresses climate change and that should be specifically called out
- Claire Coleman added community foundations, business leaders, and philanthropic leaders

Science and Technology

21. Support climate science for Connecticut.

- Katie Dykes explained that recommendation 21 is about developing a program and a process for establishing science that can inform policy and operational decisions that need to be addressed
- James O'Donnell: It is very important to keep track of the advancement of science over the next decade. The need for decision making that is supported by this type of information is critical. A point that is missed in this summary is that it is also important to think about what we should have measured in the past so that we can focus on making those measurements in the future. We need to be more uniform in our data gathering, for example, in communities where science information is not being gathered routinely or in places where there is a sparsity of resources.

Public Comment

Patricia Taylor: In regard to recommendation 1, I would like to reiterate Lori Mathieu's concern about the use of the term "health barriers". We understand that the health hazards that you have listed are barriers to improving energy efficiency because they are risks and they endanger human health, so it is important that the work to remove these risks is accomplished in a way that is safe to workers, residents, and the community. It is important that regulations are not reduced to expedite the removal of these health hazards. Health hazard or health problem might be a more appropriate term to use.

Mark Mitchell: In some of the recommendations here, you say 'community planning' but you do not include 'those who are most vulnerable' and often times community planning does not include those who are most vulnerable. So I ask that you include that language. We also talked about an environmental justice advisory panel to advise on state level and regional level groups. We are very pleased with the minimum 40% equity funding that has been recommended. We also want to make sure that over the next year there will be a public health focus on mitigation. We also talked about enhanced investment in environmental justice organization for community engagement. If we want EEJ communities to engage in the GC3 process, there needs to be state funding to kick it off.

Susan Masino: We need to be as preventative as possible in terms of mental health issues. This affects everyone but especially already vulnerable populations. We need assurance that there are safety nets in place for things like public health issues. A second comment is about climate science education. We need to make sure that education around climate science is not all doom and gloom because this also increases anxiety in the younger population. If young people know that there are systems in place that are simple, equitable, and sufficient it will help to reduce stress.

Denise Savageau: I would like to make a comment about the nexus between food, water, and energy, because it is so important when we talk about climate change. We need to make sure we are balancing all of these sustainably. Sometimes there can be too much focus on the energy piece or what climate is doing to us but it is very important to think about it all together in this broader context. To be resilient, we need to look at the adaptation and mitigation pieces somewhat simultaneously.

Joanna Wozniak-Brown: This is regarding the statewide evacuation method. I appreciate the change in wording from it being statewide evacuation route to being a state supported but locally planned evacuation route. Unfortunately, a lot of towns don't have the GIS expertise in house to conduct that type of transportation routing combined with the climate vulnerability data and so a state presence will be critical.

Mark Mitchell: As part of this process, we need to collect data on the benefits of intervention in climate change, but also other benefits and we need to be able to put in place the systems to measure climate intervention benefits.

Lynne Bonnett: There is a lot of talk in these reports of public health but what is really lacking is the institution that could most easily convey information to patients about the importance of their environment and that is the medical profession, and they are absent. The information is not being communicated to people who need to know it and the most qualified people to convey that information are silent.

Laura Cahn: I am concerned about the level of importance given to some of these issues. I want emphasis paid to public health assessments for everything. There are huge issues with people spraying herbicides, artificial turf, and chopping down trees. I am concerned about where in the GC3 process all of this fits because these are things that need attention right now.

Meeting Chat

14:33:54 From Rebecca French : https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-2020-agendas-and-minutes/GC3_List_subcommittee_members.pdf

14:34:37 From Rebecca French : https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-2020-agendas-and-minutes/GC3_Adaptation_Resilience_Subcommittee_agenda_120720.pdf

14:45:25 From Alanis Allen : <https://portal.ct.gov/DEEP/Climate-Change/GC3/GC3-Working-group-reports>

14:48:55 From Alanis Allen : Send a message to me for Public Comment

15:02:44 From Anthony Cherolis : Public Comment - My experience with evacuation route planning (based on previous investigation) was that it didn't significantly consider zero-car ownership households. 29% of households in New Haven are zero-car. There are equity and environmental justice considerations that need to be a part of that. 20% of Bridgeport households are zero-car.

15:03:19 From Anthony Cherolis : Car-based evacuation plans also run into congestion and capacity issues.

15:05:19 From AARON GOODE : agree with Tony... see New Orleans in 2005

15:05:39 From Mark Mitchell : Public Comment-Agree with Tony's comments. The public does not know about evacuation routes. How is the public informed. Where is it posted?

15:08:18 From Alanis Allen : The Public Comment period will be towards the end of the meeting. You can send me a private message so I can add your name to the list of people who want to speak at that time.

15:10:32 From Rebecca French : For anyone wishing to provide a formal verbal public comment, please sign up to speak by sending a private chat to Alanis Allen. We will open the floor for speaking to those who have signed up around 4:30pm.

15:15:14 From Anthony Cherolis : (Informal Public Comment) Re: Public Health - This is a perfect section to tie into school bus electrification to reduce youth (specifically urban youth) disparate exposure to motor vehicle exhaust / diesel particulate and resultant inequity.

15:19:05 From Gannon Long : What an eye, Curt! Love the attention to detail among this group

15:19:32 From Anthony Cherolis : (Informal public comment) Stormwater management and public health is something we've been thinking about a lot, which connects back to resiliency and reduction of heat island impact while also improving urban air quality. Sadly, green infrastructure hasn't been part of the metro Hartford region's stormwater contamination management plan. All of MDC's stormwater management has been focused on very expensive mixed stormwater + sewage tunnels with very little ground level equity and urban climate change resiliency benefit.

<http://allfamoustogether.blogspot.com/2018/12/lets-get-wet-green-infrastructure-ftw.html>

15:19:37 From Suzi Ruhl : as part of emergency response, it is vital to address basic needs of the impacted populations, considering 2 generation maternal mental health needs. In addition to food, items such as medicine, diapers, etc should be included in preparedness and response.

15:22:17 From Mark Mitchell : You really need local planning with input from the high-risk populations.

15:23:21 From Gannon Long : Yes - the original emergency plan the GC3 emergency plan refers to had public participation from about 40 people... most of whom worked for the state. I think we can do better.

15:23:36 From Mark Mitchell : Public health did not include climate mitigation. It should.

15:25:53 From Denise Savageau : vulnerable communities also don't have access to food etc during major events. If they lose electricity, they lose all the food in the frig etc. Also not all public housing has emergency generators so after 24 hours, they no longer have lights in hallways etc. Need also to explore evacuation from a social perspective. Folks won't leave because afraid of looting etc. Everything here happened in Sandy in CT and the town that I worked in.

15:28:01 From Samantha Dynowski : 40% might even be low to be equitable, so perhaps at the words "at least"

15:28:51 From Mark Mitchell : I was also going to suggest "at least" to the 40%.

15:29:59 From Anthony Cherolis : (Informal question / comment) Does this Financing and Funding (FFAR) section mention the in-process cap-and-invest Transportation and Climate Initiative that would reduce emissions from gasoline and diesel while investing in sustainable transportation, transit, active transportation, and electrification? Some of those projects would include adaptation and resilience benefits. - <https://www.transportationandclimate.org/main-menu/tcis-regional-policy-design-process-2019>

15:33:31 From Denise Savageau : C-PACE has been underutilized in CT. Need to look at why this is so and fixing the program for broader use of the program

15:36:12 From Robert LaFrance : Did the "Municipal Option" make it into this document? It enables municipalities to establish a Buyers Conveyance fee.

15:37:39 From Denise Savageau : Without being able to view the entire document, one item that needs to be addressed if it hasn't been is funds needed for long term recovery from a major storm events. I have been a proponent of increased funds for Pre-disaster mitigation planning and implementation BUT, no matter how much we plan and/or mitigate, we will have disasters and we will need recovery funds. Not just in the short term (first 6 mos) but for the longer recovery. Federal funds are not enough. Most go to state and local governments and not to individuals.

15:37:56 From lynne bonnett : re 3rd party oversight for bonding; excellent idea that we need not only in this but in energy efficiency monies that are supposed to help LMI residents.

15:39:20 From Anthony Cherolis : Re: bonding - 2020 Connecticut bonding bill included money for planning and implementing interstate expansion to I-84 and I-95 which would increase driving and greenhouse gas emissions in the face of a climate emergency. :(

15:39:44 From Anthony Cherolis : (anti-strategic bonding)

15:42:02 From Susan Barney : On the topic of nature-based solutions that Curt Johnson brought up, we could increase climate resilience by rewarding towns for not develop[omg farmland and open space that run along rivers. Retain land next to rivers up to the 500-year flood line for storm-water storage and preventing local and downstream flooding during extreme climate events and microbursts.

15:44:09 From Rebecca French :

https://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Bill&bill_num=HB07006

15:45:09 From Rebecca French : See Sec. 15 (b) of PA 20-5 for eligible entities

15:49:37 From Bonnie Potocki : item 9 a CT-approved list of shovel-ready infrastructure

projects for the White House office climate change to led by John Kerry

15:53:49 From Joanna Wozniak-Brown : Requiring climate change vulnerabilities and potential solutions in POCDs and NHMPs through state legislation would record locally supported projects. While "encouraged," there are currently no state or federal regulations that require climate change adaptation in NHMPs.

15:53:52 From Anthony Cherolis : So far, we're putting all of our funds into grey infrastructure in Hartford, Connecticut. It's a sad plan re: ghg mitigation, equity, climate resilience, and environmental justice.

15:54:14 From Denise Savageau : You also need to identify which federal agencies are best at getting work done on the ground and implemented. Some are more friendly than others and our Congressional legislators can make sure the funds come the easiest channels depending on what you want to accomplish. Example FEMA has pre-disaster funding but not as easy to work with. USDA NRCS has funding for Emergency Watersheds such as the work being done in West Haven to buy out properties and restore.

15:54:20 From Anthony Cherolis : (The MDC stormwater contamination reduction plan, to be specific - which gets approved by CT DEEP)

15:59:10 From Amy Paterson : Following up on Robert LaFrance's question regarding inclusion of municipal funding option as a mechanism for municipalities to fund mitigation and resilience strategies. That funding mechanism, which is optional and comes at no cost to the state, besides part of Funding & Financing Adaptation and Resilience recommendations, is set forth in the Forest SubGroup report as well.

16:02:45 From Mark Mitchell : It is really important to support community engagement in the GC3 process. Foundations do not currently support environmental justice. It will probably take time for them to establish and raise funds to do this. It would be important for the state to provide seed funding.

16:03:23 From Denise Savageau : Agree with Kevin - need to figure out Public Private Partnerships

16:03:32 From Gannon Long : Agreed Kevin. Why don't we expect Tesla, Nissan and Ford to help put charging stations along the high ways? WHY should everyone else subsidize that?

16:03:59 From Kevin Grigg : Corporate greed?

16:04:21 From Gannon Long : that's why they don't do it... but you're right to point out that our expectations should be higher for them.

16:04:29 From Mark Mitchell : I agree with Lori that vulnerable populations should be included in adaptation planning. Many community processes can ignore those most vulnerable. They should be specifically called out.

16:04:30 From AARON GOODE : in terms of funding sources, would like to see S.E.P. projects geared much more towards climate adaptation and resilience with focus specifically on EJ

16:05:00 From Kevin Grigg : And for us; I don't represent these kinds of companies...

16:06:38 From Patricia Taylor : The private sector's participation in funding climate crisis adaptation planning and measures may be seen as part of their extended producer responsibility in ignoring or hiding the crisis.

16:08:05 From Kevin Grigg : We just owe it to ourselves as well as to the many communities and clients that we serve. We're all part of the problem; we all need to be part of the solution(s).

16:11:28 From Denise Savageau : Totally agree with Jim and Lori

16:11:29 From Curt Johnson : I have to leave for another meeting. Thank you Commissioner, Rebecca and everyone. Great discussion.

16:13:21 From Mark Mitchell : We need to monitor and document health and other benefits of climate interventions. The indicators should be consistent with any national indicators.

16:13:32 From Denise Savageau : Also should include the importance of federal science such as USGS stream gages, NOAA tidal gages etc. We need our legislators to know these are important

16:14:41 From Denise Savageau : And should be expanded

16:22:13 From Rebecca French : deep.climatechange@ct.gov to contact DEEP about this meeting

16:26:43 From Huan Ngo : Shift in animal migration due to climate change and potential zoonotic pathogen jumping species such as our current pandemic? eg, bird & small mammals that

don't fit in the vector-borne classification? Contact with livestock?

16:28:42 From Anthony Cherolis : Huan - For sure. We're already seeing mosquito and tick borne illnesses of severe nature that are moving into the region with climate shift.

16:28:57 From Mark Mitchell : The public usually ranks mental health as a much higher priority than policymakers.

16:29:22 From Anthony Cherolis : Lonestar Tick is now in Connecticut, but that has a side benefit of making folks allergic to red meat and pork.

16:29:47 From Mark Mitchell : Mental health may need to be culturally tailored.

16:30:23 From Lori Mathieu : Thank you Susan

16:30:59 From Suzi Ruhl : Psychological well-being is identified as a goal in the National Disaster Recovery Framework and PPD-8.

16:34:10 From Susan Masino : Absolutely agree we need to solve this simultaneously!

16:34:32 From Suzi Ruhl : The NDRF reflects as core principles nine significant themes and recommendations: These principles are:

- Individual and Family Empowerment.
- Leadership and Local Primacy.
- Pre-Disaster Recovery Planning, Partnerships and Inclusiveness.
- Public Information.
- Unity of Effort.
- Timeliness and Flexibility.
- Resilience and Sustainability.
- Psychological and Emotional Recovery

<https://www.fema.gov/pdf/recoveryframework/ndrf.pdf>

16:37:26 From Huan Ngo : Thank you

16:37:27 From Del McCloe : Thank you!

16:37:34 From Amy Paterson : Thank you!

16:50:12 From Mark Mitchell : Looking into health impact assessments and cumulative risks is something that needs to move into regulatory framework.

16:50:30 From Laura Cahn : I agree.

16:51:39 From Rebecca French : <https://portal.ct.gov/DEEP/Climate-Change/Climate-Change-Listserv>

DRAFT FOR DISCUSSION**Recommendations of the Governor's Council on Climate Change
to begin to be implemented in 2021 and early 2022***Adaptation & Resilience Subcommittee Review, December 7, 2018***Climate Mitigation Strategies (Mit.)
Buildings Sector**

1. **Address Health & Safety Barriers to the Adoption of Energy Efficiency.** (ILU LUB-8) To assist low to moderately low-income households increase the energy efficiency and thermal comfort and safety of their homes and remove the indoor health barriers (asbestos, mold, PCBs, lead paint, CO, radon, natural gas leaks) to efficiency upgrades such as weatherization.

Infrastructure and Land Use (ILU)

2. **The GC3 Subcommittee on Climate Adaptation will evaluate and provide updates on the implementation of strategies and actions pertaining to climate adaptation and resiliency** that are established in various state- level reports and plans, and other activities including but not limited to:
 - a. statewide evacuation route planning and vulnerability assessment
 - b. phased and/or prioritized vulnerability assessments of publicly funded transit (bus and rail) facilities, as funding and resources become available
 - c. Identification of geographically isolated communities due to limited ingress/egress resulting from coastal and inland flooding events using 2050 SLR, storm surge and inland flooding predictions
 - d. best available science for updating standards and guidelines used in transportation and other engineering design; including sources of sufficient confidence, specificity, acceptance and scale for CT/northeast region
 - e. proposals to address needs related to ownership, operation and maintenance of resilience structures

Alternative for #2 above:

Develop a governance structure to facilitate oversight, implementation of strategies and actions pertaining to climate adaptation and resiliency. Governance structure may include interagency, COGs, municipal, and other stakeholder participation.

Advance priority planning tasks related to resilient infrastructure in Connecticut.

Planning tasks to begin in 2021 include:

- statewide evacuation route planning and vulnerability assessment
- phased and/or prioritized vulnerability assessments of publicly funded transit (bus and rail) facilities, as funding and resources become available (ILU T-3)
- identification of geographically isolated communities due to limited ingress/egress resulting from coastal and inland flooding events using 2050 SLR, storm surge and inland flooding predictions (ILU T-4)
- best available science for updating standards and guidelines used in transportation and other engineering design; including sources of sufficient confidence, specificity, acceptance and scale for CT/northeast region (ILU T-5)
- proposals to address needs related to ownership, operation and maintenance of resilience structures

3. **Establish Connecticut community resilience program.** (ILU LUB-3) The program would provide technical assistance to municipalities and Councils of Governments on resilience actions across the state, address both short-term and long-term impacts of climate change, bring together all relevant planning documents and facilitate dialogue amongst state, regional and local stakeholders, and prioritize vulnerable populations. Focus of this engagement would be on more resilient development, land use and building practices.

Public Health & Safety (PHS)

4. **Develop a coordination framework for public health and safety priorities with a focus on the intersection of health equity and climate impacts.** The framework should address the following:
 - a. developing guidance for schools, day cares, and youth sports teams for prevention of heat-related illness and death. (PHS-1)
 - b. addressing heat exposure and prevent heat-related illnesses at outdoor worksites and at indoor facilities where potential heat-related hazards may exist (PHS-2)
 - c. establishing evidence-based standards for local heat and air quality response plans (PHS-3)
 - d. protecting low-income residents and renters, particularly those in government supported housing, from indoor heat exposure (PHS-4)
 - e. evaluating ozone alert education efforts (PHS-5)
 - f. increasing airborne allergen monitoring (PHS-6)
 - g. estimating the impacts of climate change on 2030 and 2050 ozone levels in Connecticut and identifying potential effects on the health of Connecticut residents (PHS-7)
 - h. developing state and regional food security action plans to mitigate the risk of climate change and extreme weather events on the food system (PHS-31)
 - i. establishing best practices for disaster case managers for addressing needs of mental health populations in disaster response (PHS-32)
5. **Prepare Connecticut for vector-borne illnesses.** Vector-borne illnesses are expected to increase with a changing climate and state coordination is needed to ensure this issues is addressed (PHS-8). Preparing Connecticut for this impact should include the following:
 - a. strengthening monitoring and surveillance (PHS-9) of vector populations and associated vector-borne diseases
 - b. assessing and projecting the Impacts of climate change on ticks, mosquitoes, and vertebrate hosts using mathematical models (PHS-10)
 - c. developing vector-borne disease prevention and management guidelines for schools, outdoor recreation, and homes (PHS-11)
 - d. evaluating vector control strategies and ensure support for implementing sustainable vector management programs (PHS-12)
 - e. monitoring insecticide and antimicrobial resistance in vector populations and vector-borne pathogens (PHS-13)
6. **Prepare public and private drinking water systems for climate impacts.** Implementation and planning activities should include, but not be limited to:
 - a. developing water conservation measures & communication guidelines to manage droughts

- b. developing a GIS database and framework for continued updates to capture critical facilities to identify which public water systems (PWS) they are served by and which critical facilities are served by their own PWS
 - c. updating planning guidelines, drought triggers and drought response protocols at least once per decade
 - d. developing emergency interconnections between PWSs to ensure that multiple sources and interconnections are available for mutually beneficial sharing of water during emergencies
 - e. using source water protection and the Drinking Water Quality Management Plans to encourage resiliency and increase funding and support for investments in watershed protection (PHS-22)
 - f. developing a statewide GIS database and framework for continued updates that identifies the location of private wells and decentralized sewage disposal systems (PHS-24)
 - g. tracking harmful or potentially harmful cyanobacteria algal bloom data in Connecticut and provide technical assistance to community water suppliers to address and prevent these events (PHS-26)
 - h. Develop an energy audit program for water systems (Water and Wastewater) to increase energy efficiency and reduce greenhouse gas emissions across the water industry (PHS-28)
 - i. identifying and improve wells that are located within a flood zone to increase resiliency and reduce risk of flooding (PHS-29)
 - j. incorporating resiliency into the consideration of new laws, regulations, and policies and promote greater education of PWS about the importance of resiliency, (PHS-30) specifically:
 - i. regulate the construction of public water supply wells in flood zones
 - ii. develop guidance for local land use commissions on revising regulations to make well construction in flood zones more stringent
 - iii. incorporate a resiliency metric into the sanitary surveys through the small system CAT (“scorecard”) and monitor results over time
 - iv. update the water supply planning regulations to require assessment of the potential impacts of climate change (changing rainfall patterns, flooding, sea level rise, drought management) on the water system as part of Water Supply Plan updates.
7. **Plan for the emergencies related to the impacts of climate change and ensure the incorporation of vulnerable populations into those planning processes.** While Connecticut has an ongoing natural hazard preparedness planning process, these recommendations specifically target how to better coordinate and incorporate the needs of vulnerable populations. Planning activities should include the following:
- a. creating and maintaining a statewide inventory of redundant back-up power services at critical facilities statewide and buildings where institutionalized vulnerable populations reside and establish a long-term funding mechanism for new systems and repairs. (PHS-14)
 - b. enhancing support for communication and outreach programs to educate residents about all aspects of preparedness, response and recovery for extreme weather events; include emphasis on communication strategies for vulnerable and Spanish-speaking populations (PHS-16)
 - c. coordinating state and regional access and functional needs (AFN) emergency preparedness and response to ensure safe and equitable access to communication and evacuation services and of medical care during natural disasters (PHS-16)

- d. completing the draft State Evacuation Response Framework (PHS-17)
- e. developing emergency interconnections between PWSs to ensure that multiple sources and interconnections are available for mutually beneficial sharing of water during emergencies (PHS-21)
- f. establishing best practices for disaster case managers for addressing needs of mental health populations in disaster response (PHS-32)

Financing & Funding Adaptation & Resilience (FFAR)

8. **Implement a 40% equity funding commitment.** Develop a methodology for measuring and tracking expenditures/benefits for equity, in line with a commitment to ensure 40% equity commitment for project spend/benefits in adaptation and resilience projects and programs. Seek partnerships with non-profits to develop participatory design processes for advancing project development in vulnerable communities.
9. **Develop “project pipeline” for state and federal funding opportunities.** Inventory existing resilience infrastructure, and develop a “project pipeline” of resilience and adaptation investments, including support for determining project feasibility, performing benefit-cost analyses, and identifying matching funds. One goal of the project pipeline will be to position projects effectively for federal grant funding, if/when it becomes available, and to prioritize projects based on decision support criteria for near, mid- and long-term project viability.
10. **Develop a plan to incorporate resilience into existing state investment programs,** including development of a climate resilience and disaster preparedness standards and climate risk rating. Evaluate opportunities to incorporate resilience into housing rehabilitation and resilience programs; tax credit programs (New Market Tax Credit, Opportunity Zones, P.A. 490, 4% Low-Income Housing Tax Credit); state assistance for economic development; and building codes and standards
11. **Enhance municipal authority to undertake resilience projects.** (cross-listed: ILU) The municipal resilience authority would include the ability to pay for projects using borrowed or granted funds; to assess fees; and to construct, operate, and maintain resilience projects, including green infrastructure and nature-based solutions. At the municipal level resilience authority could be granted through updating the Flood and Erosion Control Board statutes.
12. **Create guidance to use Tax Increment Financing (TIF) Districts for resilience.** Existing TIF authority allows municipalities to assess fees based on property assessments. The revenue generated from TIF districts may be used to fund resilience projects either through direct cash to pay back borrowed funds.
13. **Support the creation of stormwater authorities to be adopted statewide by municipalities.** (cross-listed: ILU & WNL) The municipal stormwater authorities would reduce stormwater pollution and flooding, and help municipalities afford green infrastructure and resiliency investments.
14. **Evaluate the creation of a state-level climate change and coastal resiliency reserve fund that would be managed by the Treasurer of the State of Connecticut.** The coastal resiliency reserve fund would allow the Office of the Treasury to manage municipal coastal resilience fund investments authorized by PA 19-77 on behalf of the municipalities.
15. **Support the creation of Property Assessed Resiliency as part of Commercial Property Assessed Clean Energy (C-PACE).** C-PACE is an innovative financing solution from the

Connecticut Green Bank (“Green Bank”) that makes clean energy improvements to properties safe, accessible, and affordable. The recommendation of Property Assessed Resiliency would be included within and expand the purview of the C-PACE public policy to include resiliency as a qualifying commercial real property measure.

16. **Support the creation of an Environmental Infrastructure Bank in Connecticut.** The recommendation of creating an Environmental Infrastructure Bank would be included within and expand the purview of the Green Bank public policy to include “environmental infrastructure” as an area of investment. The policy would enable the Green Bank to use its existing bonding authority to finance environmental infrastructure projects, and provide low-cost financing and credit enhancement mechanisms for projects and technologies.
17. **Utilize state general obligation bonds under an expanded microgrid and resilience grant and loan program to fund adaptation and resilience programs and projects.** The expanded microgrid and resilience grant and loan program should prioritize proposals that benefit vulnerable communities; provide assistance with community planning that includes, but is not limited to resilience project feasibility, including benefit-cost analyses; provide assistance to recipients for the cost of design, engineering services; provide nonfederal cost share for grant or loan applications for projects or programs that include microgrids or resilience; and allow the establishment of any financing mechanism to provide or leverage additional funding.
18. **Convene the insurance industry on carbon neutral investment policies and promote and grow the catastrophe bond market.** Hold a conference with the insurance industry and state regulators to identify different strategies where the industry can assist states in reducing reliance on fossil fuels, as well as understanding how insurers can assist in mitigating the impacts of climate change on property, including increasing disclosure of climate-related risk and identifying alternative methods to protect communities through Catastrophe (CAT) Bonds and other risk transfer vehicles.
19. **Build outreach and capacity and tracking for the increased uptake of flood insurance.** Flood insurance is an adaptation and resilience tool that is underutilized in Connecticut. Not only does flood insurance provide a means to recover from flood damage, but it also sets up a structure to incentivize behaviors that lower the risk of flooding such as elevating homes or reducing community flood risk. Savings on flood insurance can be used as a financing mechanism to pay for adaptation and resilience measures.
20. **Convene Connecticut’s community foundation and philanthropic leaders on addressing climate change.** Convene an intensive workshop to address investing in community capacity building, and annual climate adaptation training of environmental justice organizations with the goal of establishing an ongoing partnering relationship and working group among the stakeholders.

Science & Technology (S&T)

21. **Support climate science for Connecticut.** Propose a process to review and provide climate science projections for Connecticut and to track climate change impacts occurring in the state. The process should include, but not be limited to determining report intervals (e.g. every 5 or 10 years for projections / every 1-2 years for impacts), scope (including identifying indices and multi-solving opportunities), institutional roles, partners, and funding. The GC3 report contains both sea level rise planning scenarios and projected climate impacts for Connecticut in the areas of temperature, precipitation and storms. Connecticut’s climate has already been

impacted and will continue to be impacted by climate change, necessitating ongoing tracking of those impacts within the state. Both projections and tracking current impacts are essential climate science to inform decision-making. Additionally, this information must be shared and utilized on the ground and therefore the proposed process should also include:

- a. identifying research needs and disseminating current climate change adaptation research and technical resources to the appropriate stakeholders
- b. selecting and establishing pilot region(s) to quantify and demonstrate site-specific co-benefits of comprehensive climate resilience planning that is proactive and risk-based

22. Support climate science education. Develop an inclusive Connecticut-based training strategy for climate science and impacts for formal and informal educators. This will help them be effective communicators of climate science, climate change impacts, and resilience strategies. The program should reach audiences from K-12 school systems, current, and future teachers, municipal leaders, and diverse community groups.