Governor's Council on Climate Change (GC3)

Adaptation Planning and Implementation Working Group Meeting Minutes

June 4, 2020

Zoom Meeting

2:00PM - 4:00PM EST

Attendance: 39

Welcome and Introductions

Facilitated by Working Group Co-Chairs – George Kral, Matt Fulda

• The meeting began at approximately 2:02 PM with Matt Fulda facilitating a quick round of introductions and introducing the first agenda item. Brian Thompson announced that Rebecca French, previously with the Department of Housing, has taken up the role of director in the Office of Climate Planning at CT DEEP.

Review of EO3 Charge to the Working Group

Facilitated by Brian Thompson, DEEP

- Brian Thompson ran through a quick refresher of what Executive Order 3 requires of the Adaptation Planning and Implementation Working Group, and of the GC3 as a whole.
 - The objectives are laid out in the uploaded meeting slides and can be read in their entirety there.
 - The red portions of text are the areas that specifically correspond to the goals of this working group. One of the primary concerns of the group is to create a report that will be presented to the governor and developing a revised statewide adaptation and resilience plan. This plan will utilize the most current data to develop new recommendations, and expand on existing recommendations, for improving resilience across the state.
 - o An overall goal among all working groups is to address all issues and recommendations through a primary lens of equity and environmental justice.

Climate Change Conditions Guidance

Facilitated by Science & Technology Working Group

- Jim O'Donnell, from CIRCA, provided a presentation for this portion of the meeting that can be viewed in the uploaded meeting slides. A summary of some broad-scale changes can be viewed in the first slide, the consequences of which Jim suggested should be considered by the GC3 report.
 - o Jim pointed out that one key consideration, specific to Connecticut, is that even though the shape and size of Connecticut floodplains won't change very much over time, the depth of the waters flooding them will continue to increase.
 - O Another key concern will be that temperatures in Connecticut could increase up to 5°F by 2050, which could have lot of potential negative implications. Addressing changes in sea level, precipitation and temperature will be expensive, but doing nothing will be even more costly in the long run.
- One component from the 2011 climate change preparedness plan suggests developing Connecticut-specific climate change projections based on three climate drivers-temperature, precipitation and sea level rise- and then employing monitoring systems to closely document changes in these areas.
 - Jim mentioned that this has been done in a limited sense, but that it would be a
 good idea to expand on this recommendation by developing more specific
 scenarios based on the projections, and what the implications could be.

- o The Science and Tech working group is proposing that the new preparedness plan use current high projections for 2050 to develop recommendations, but that information should be reviewed and revised every 5-10 years.
- A graphic shows three different monthly average air temperatures for Connecticut over three, 40-year periods. The most recent curve shows an increase in mean monthly temperatures.
- Another graphic shows the months of first and last frost in Connecticut over a 40year period. Warming temperatures cause the mean time between first and last frost to increase by approximately four weeks.
- A third graphic shows an increasing mean sea level based on historic tide gauge measurements taken at several locations on Connecticut' coast.
- Jim presented several other useful graphics that show projections for different climate change drivers throughout Connecticut- these can be seen in the uploaded meeting slides.
- One of the biggest impacts to anticipate in many Connecticut towns is not that there will be a huge change in the 100-year floodplains, but there will be a significant increase in how many times it floods. There is a graphic in the slides demonstrating this anticipated increase in flood risk.
- One graphic shows how there will be a proportional increase in the number of people being treated for heat-related illness as there is an increase in the number of days that reach temperatures of above 90°F.
- Precipitation, overall, is predicted to increase by roughly 8% by 2050 while the impacts on storms and storm systems are a little less clear.

Theme Area Progress Report

Facilitated by Theme Area Leads: Transportation, Utility Infrastructure, Land Use/Buildings, Public Health & Safety
Statement of Scope
Impacts of Climate Change

- **Public Health and Safety**: Lori Mathieu and Laura Hayes facilitated for this theme area, and began by stating that many of the impacts brought up by Jim O'Donnell during the presentation have profound impacts on public health and health equity.
 - o Presented their statement of scope, which can be read on the uploaded meeting slides. It addresses present and foreseeable threats to health and safety, with a focus on health equity (which they provide a definition of).
 - There are dynamic threats to health and safety posed by impacts of climate change, and they have outlined some of those challenges based on reports from other regions (we are absent specific projections for Connecticut).
 - They have proposed (but not officially adopted) a derived a set of planning and implementation actions for public health and safety concerns that is guided by recommendations and guidelines set forth by the Centers for Disease Control and Prevention.
 - They have started drafting a list of climate change threats to public health and safety, but would like to have a refined list specific to Connecticut (to help better inform planning actions). The draft list is shared on the uploaded meeting slides.
- Transportation: Robert Bell, from CT DOT, facilitated for this theme area.

- O Presented the statement of scope, which can be seen on the uploaded slides. One of their major goals is to coordinate with other working groups to ensure that their projections and recommendations can complement each other and have the greatest possible utility in all locations across the state.
- o They will be evaluating the 2019 natural hazard mitigation plan because specific components of that relate to the goals of this working group.
- The theme of their scope is to enhance the abilities of all levels of government to make their assets and operations more resilient to the impacts of climate change.
- They're doing a lot of research to develop a framework of what existing resiliency measures look like, to better identify progress made (or not made) since 2011. Then they can tailor their recommendations around this information.
- o They would like to assemble a "best practices" document.
- **Utility Infrastructure**: Todd Berman, of United Illuminating, facilitated for this theme area.
 - Presented their statement of scope, which can be seen in the uploaded slides. They
 have identified seven core sectors of utility infrastructure and how potential
 climate impacts interact with these sectors. Some of these interconnections are
 mapped on a diagram shown in their uploaded slides.
 - They will be proposing recommendations that encompass short-term and long-term actions, and will also be placing emphasis on vulnerable communities.
 - o They are still searching for additional subject-matter experts in several areas.
- Land Use and Buildings: Matt Fulda facilitated for this theme area.
 - They have put together two draft statements of scope, which can be seen in the uploaded slides. One key component for this group will be providing guidance on conservation and development practices ranging across all scales.
 - One of their primary concerns is in regards to built environments located within current and projected floodplains, especially as the depth of the water in those floodplains continues to increase. They would like to specifically target currentlydeveloped areas, and focus their conservation and preservation recommendations on existing natural resources.
 - Another focus is on environmental contamination of the land and buildings in primarily low-income areas. Equity and environmental justice considerations will play a huge role in this.
 - O They will be looking for options to make recommendations in regards to the buildings themselves, specifically sustainability recommendations such as using more sustainable building materials or using passive house. This has a lot of application in looking at how affordable housing can be adapted to be safer, healthier and greener.
 - O They are looking to identify the most critical climate change impacts, focusing on the same ones that were presented by Jim O'Donnell, and center many of their recommendations around those projections, with input from the other working groups whose interests intersect with this group's.

Discussion

Facilitated by Working Group Members
Theme Area Scopes

Climate Change Conditions and Impacts

- Mark Mitchell commented that the EEJ (Equity and Environmental Justice group) is planning on putting together maps to demonstrate vulnerable populations/locations/institutions across the state. Mark commented that it would be a good idea to coordinate that information with several of the subgroups.
 - Todd Berman commented that these maps would be a great resource for the subgroups.
- Mark Mitchell also asked about the expected increase in frequency of droughts (brought up during Jim O'Donnell's presentation) by 2050 and whether this could be expected to lead to a frequency in wildfires?
 - Matt Fulda commented that the drought prediction is complicated because the report mentioned that there will be more predicted precipitation but at the higher projected temperatures, there will be more evaporation, leading to depleted water supplies. The probability of more droughts is a low-confidence prediction, and there is not enough evidence to make specific predictions.
 - Lori Mathieu added that in light of concerns regarding frequency of droughts, it would be in the public health and safety group's interest to have the reservoir safe yield calculations updated.
- Joanna Wozniak-Brown noted that the vulnerability model that they are building is using exposure sensitivity and adaptive capacity to try and create a more complete understanding of the state's vulnerable locations/populations/assets.
- Edith Pestana asked for the source of the graph/information regarding hospitalization rates and what medical conditions were measured? Edith also asked whether air quality was factored in with the extreme heat events?
 - Jim O'Donnell responded that he would provide the source of the paper, and reiterated that the role of temperature on health deserves much more focus than it has historically received.
 - Laura Hayes contributed that data on heat-related hospitalizations is collected and available through the Environmental Public Health Tracking Network, which is also currently working on some vulnerability assessments. The PH&S group hopes to move into creating some projections in regards to hospitalizations, with the help of the Science and Tech working group.
- Juliana Barrett asked whether riverine floodplains would expand, even if coastal ones didn't?
 - O Jim O'Donnell responded that the areas that are tidal probably would expand a little bit but it's hard to be generic in regards to rivers because they're all so different. The general answer, however, is that the rivers will have higher levels so that their 100-year level would be higher. Expansion of their flood plains would depend primarily on the slope of the river and depth of the water at any given point.
- Laura Bozzi asked for a timeline on the vulnerability mapping projects.
 - o Mark Mitchell responded that the mapping committee has met once but he wasn't involved and was unsure of the timeline.
 - Jim O'Donnell responded that now would be a good time to reach out and coordinate directly with the mapping committee, to best combine efforts and interests.

- Aicha Woods asked what community engagement looks like in the process of a
 vulnerability assessment? Also that much of existing affordable housing is usually in
 areas that correspond to current or historical environmental contamination, so it might be
 a good idea to require cleanups in these areas and limit noxious uses near these housing
 areas.
 - O George Kral commented that this is really an example of how all climate impacts are local, with effects on individuals and neighborhoods. It is critical to have neighborhood-based assessments of vulnerability as well as neighborhood and individual engagement in the process of developing resiliency tools.
 - o Matt Fulda commented that CIRCA is already undertaking such a vulnerability assessment for New Haven and have had many discussions about how to conduct that engagement. They are hoping to be able to have in-person meetings with residents in the future to understand perspectives and opinions on vulnerability.
 - John Truscinski commented that community and individual involvement are vital, but could be challenging over the next 6-12 months because of COVID-related issues.

Public Comments

• No public comments were received.

Next Steps and Adjourn

- The next meeting will be in the evening on July 15th PM EST.
- Moving forward, high-level outcomes will need to be determined within each of the four subgroups, along with objectives.
- Brian Thompson added that there is still some question of whether there will be interim steps in the GC3 process to produce a completed report at a later date than January, to compensate for some of the challenges posed by restrictions of COVID-19.
- Meeting adjourned at approximately 4:05.