
**Governor's Council on Climate Change (GC3)
Science & Technology and Infrastructure & Land Use Public
Forum – Utility Infrastructure (UI) Working Group Break-Out
Session
MEETING MINUTES**

Meeting Date: October 5, 2020

Meeting Time: 4:30 pm –
6:00pm EST

Meeting Location: Online
(Zoom meeting)

ATTENDANCE

Working Group Member	Title	Organization	Present
Todd Berman	Manager – Environmental Programs & Projects	The United Illuminating Company	Y
Jennifer Perry	Director – Water Planning and Management Division	CTDEEP	Y
Kate Brennan	Environmental Permitting & Compliance Specialist	LaBella Associates/The United Illuminating Company	Y

Public Attendees	Title	Organization	Present
Mikey Hirschhoff	--	Garden Club of New Haven	Y
Deb Denfeld	--	Fuss & O'Neill	Y
Stanley Nolan	--	University of Connecticut	Y
Holly Drinkuth	--	The Nature Conservancy of Connecticut	Y
Bonnie Potocki	--	--	Y
Kathy Fay	--	Neighborhood Housing Services of New Haven	Y
Steven Walleth	--	CT Department of Public Health	Y
Diane Hoffman	--	Hamden Alliance for Trees	Y

AGENDA & NOTES

Welcome

Agenda Item(s)

Facilitated by Todd Berman, The United Illuminating Company

- Introductions
 - Todd, Jennifer, and Kate introduced themselves, welcomed the public attendees, and asked the attendees to introduce themselves
- Review of GC3 Utilities Infrastructure (UI) Working Group's Recommendations in the Draft GC3 Infrastructure and Land Use Adaptation Working Group Recommendations Report (dated 9/21/2020)
 - Discuss 2020 recommendation:
 - UI-5: Update safe daily yield calculations and assess current drinking water quality measures/testing to understand and address climate change impacts
 - Todd explained that this recommendation for 2020 was sensitive to the high priority of understanding safe daily yield calculations for water quantity and quality impacts
 - Holly commented that this recommendation is heavily focused on drinking water quality, but it would be useful to think about the ecological needs and other uses of water (i.e., groundwater quality issues impacting drinking water, human health issues, coastal waters and freshwaters); urges the group to think about water in a more holistic way.
 - Todd asked if another working group had talked discussed this holistic water quality/quantity issue.
 - Bonnie commented that groundwater recharge/discharge were not considered in the wetlands subgroup, and noted that thermal discharge was not discussed in other water-based subgroups/recommendations (see chat log from Kathy Fay between 17:33 and 17:34 noting these two topics were not discussed in other water-based subgroups/recommendations).
 - Bonnie stated that thermal discharge should be considered because with the temperature rising and heating up impervious surfaces, this impacts the temperature of stormwater discharging into surface waters – rivers/streams will not be receiving cold water anymore and there should be discussion about prevention or cooling of stormwater before it enters the surface water.
 - Todd noted that Bonnie's comment may not fit in the scope of the UI working group, but he urged Bonnie to submit that comment to the wetlands subgroup or generally to the GC3 Committee.
 - Stanley commented that reclaimed water/greywater reuse is important to consider. UConn has a system that enables them to reclaim their water and they would like to utilize it more. There is high value in being able to reuse that for human/animal needs rather than the mechanics in running the utility.

- Discuss 2021 recommendations:
 - UI-1: Inventory and geo-locate vulnerable utility facilities and their service areas and overlay to prioritize vulnerable populations
 - Todd noted that this idea may be spliced into something coming out of the Equity & Environmental Justice (EEJ) working group as a standing committee to continue prioritizing ideas and recommendations impacting vulnerable communities
 - UI-2: Require that all utility sectors be subject to statutory and policy-based directives that require the consideration of all projected climate change impacts in their planning
 - Todd noted that electric utilities have one small element of this recommendation in place as they need to consider sea-level rise for consideration in front of the CT Siting Council, but noted that this sort of concept needs to be expanded. Todd noted that these statutory and policy-based directives may be very challenging for smaller utility companies/municipalities to implement.
 - Kathy asked why UI working group only made one recommendation for 2020, and why were the other recommendations put up for review in 2021.
 - Todd responded that some of the UI working group's general recommendations were adopted by the larger Infrastructure & Land Use working group for 2020; the UI working group lacked some subject matter expertise from some sectors (i.e., communication, fuel) and will need to re-formulate the working group to include more of those subject matter experts for more nuanced recommendations in the future; and that all six utility sectors noted by the UI working group reports to different regulatory bodies, which makes specific recommendations on policies/statutory directives challenging for all sectors. Todd welcomed Kathy to make a comment urging the GC3 to move some 2021 UI working group recommendations into the 2020 recommendations list.
 - UI-3: Confirm there is sufficient planning and resources for a unified disaster response and recovery across all seven utility sectors, this should include annual drills and communications strategies
 - Todd stated that this recommendation is very complex given that all utility infrastructure is interconnected, and would like more subject matter experts from other sectors to refine this recommendation in 2021.
 - Bonnie commented that the unified command structure that's usually put into effect when there's a natural disaster is usually very focused and taught within FEMA through training. Bonnie asked if there was a subject matter expert who was familiar with this FEMA training.
 - Todd acknowledged these subject matter experts/type of knowledge exists in the utility community, but the UI work group was not able to consult with those subject matter experts during these discussions (largely because they were dealing with the coronavirus pandemic).
 - UI-11: Evaluate standing advisory council for infrastructure in EEJ communities

- UI-4: Study the appropriate techniques for overall resiliency that balance the costs and climate benefits associated with different electric distribution strategies.
 - Todd noted that the above-ground distribution system is one of CT's biggest vulnerabilities; the urban tree canopy has a high-value carbon, cooling, socio-economic benefit; and while the suburban community may have more tree canopy, they have more risk of prolonged outages. Todd noted that most people may want to do undergrounding, but that comes at a staggering cost. This recommendation is intended to target the most strategic and highest value points to make those undergrounding decisions, and develop other electric distribution strategies (i.e., fuel cells, grid-scale batteries, etc.).
 - Stanley commented that UConn is a micro-grid with a co-generation facility that can black start in an event. Undergrounding is trading one risk with another: trading less impact to trees with increased risk of underground utility outages due to increased flooding/sea level rise. Noted that we need to balance the risk and would need a full design/risk matrix for each location being analyzed (i.e., undergrounding on a hill may make sense, but a low-lying area by a wastewater plant may not).
 - Mikey commented that what Todd said orally should be included in the GC3 recommendations report because it captures the importance of the tree canopy for mitigation and helping people adapt to increased heat island effects. Mikey would like an increased sense of urgency because this is the most vulnerable part of utility infrastructure. Where there are areas that undergrounding may not be feasible, Mikey commented that utilities should develop priorities that include the most important, strategically located wires and utility infrastructure and move on from there to develop a plan. Technology is developing in a way that undergrounding in a flood-prone area may be possible, but there are also solutions to that. Mikey believes we should not get rid of the power grid because distributed energy mechanisms (i.e., solar) depend on being attached to the grid at some points. Mikey will make comments in writing on this subject.
 - Todd noted that there is a lot of work to be done on this subject in one year, but hopes to focus on this in-depth and come up with a more detailed set of recommendations in the future.
 - Mikey thanked Todd for his sense of urgency on this issue. Mikey noted that the Energy and Technology Committee in the CT Senate will tackle this subject in the February 2021 session coming up. The PURA forum may discuss this issue in the near future as well.
 - Deb commented that this recommendation reminds her of the natural gas utilities which are limited throughout CT by constructability and demand. Deb noted that we have alternative fuel sources for that utility, but there are no alternatives for the other utilities so it's not as convenient to find another way to do these sorts of things.
 - Todd commented that he's looking forward to welcoming more subject matter experts on this issue in the future.
 - Bonnie commented that it would be good for each working group to identify short-term and long-term priorities, as it would be helpful to general public and get buy-in.
 - Todd and Jennifer responded that this short-term versus long-term

priorities was the original concept going into the GC3 working groups, but the recommendations evolved over time. The UI working group did create a list of recommendations with implementable time-frames originally, but it was pared down into the existing draft recommendations document.

- Kathy commented that this recommendation's alternatives analysis should not be limited to comparing different alternatives, but should include analysis of micro-grids and where they work; undergrounding; where more energy storage in homes is needed; and who is responsible for these different types of things, whether community choice aggregation is required. UI-4 should be a whole list of separate recommendations with their own separate timeframe.
 - Todd urged Kathy to help us as we develop these recommendations further.
 - Kathy further defined community choice aggregation, and stated that this concept should be included in the preliminary recommendations. Kathy noted that she would like to see more thought on who decides, believes that local decisions are much more informed.
 - Todd also noted we need to further consider who pays. It's difficult to consider how to fund these efforts because we're not pricing risk correctly (ties into recommendation UI-12).
- UI-12: Price utility risk correctly
 - Todd noted that this recommendation was advanced to the GC3 Finance Committee.

Meeting Adjourned at 6:08 pm

Copy of Zoom Chat:

17:27:12 From Kathy Fay : https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3_Infrastructure_LandUse_draft_report_public_comment_092120.pdf

17:33:50 From Kathy Fay : ground water recharge

17:33:57 From Kathy Fay : thermal discharge

17:34:34 From Kathy Fay : above 2 items not seemingly considered anywhere yet.

17:37:00 From Kathy Fay : why only UI -5 for 2020?

17:41:49 From Holly Drinkuth : Thanks so much for the transparency on these challenges Todd - very helpful.

17:44:39 From Kathy Fay : Re UI-3 connect with FEMA best practices for guidelines

17:49:41 From Kathy Fay : RE-UI 3 Might want to upgrade policy and procedures for lesser emergencies as well, such as when (as recently happened in Hamden/New Haven) a broken sewer pipe on the Hamden side resulted in a spill into a river (not CSO-receiving waters) in New Haven, and New Haven was not notified until next day.

17:50:25 From Kathy Fay : Re UI 4 need a greater sense of urgency

17:50:56 From Steven Wallett : I lived in a community served entirely by underground electric. We often lost power first and restored last.

17:52:27 From Kathy Fay : RE UI-4 there should be multiple recommendations here not just a general call for a study

17:57:48 From Kathy Fay : Suggest immediate recommendation to develop a list of required subject matter experts to move these items forward

17:58:28 From Kathy Fay : PAY more attention to long term vs short term and categorize recommendations as such

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18:00:48 From Diane Hoffman : I agree with all of the points made by Mikey. Also, funding has to be viewed as a very long term effort. The overall crisis is to our natural world of which trees are fundamental.

18:00:55 From Holly Drinkuth : UI-5: Consider options for assessing water quality and quantity for drinking as well as ecological needs and other human uses. Coordinate with river and wetland working groups to holistically assess climate "water" impacts (temperature and precipitation changes) to all water (drinking, wastewater, surface, ground water, marine) .

18:08:06 From Steven Walleit : Funding Group presents on Wednesday

18:08:12 From Kathy Fay : Great work everyone

18:08:15 From Diane Hoffman : thanks very much.