COMMUNITY-CENTERED CLIMATE RESILIENCE IN CONNECTICUT

SUMMARY FOR COMMUNITIES & POLICYMAKERS

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Yale SCHOOL OF PUBLIC HEALTH
Center on Climate Change and Health

ENVIRONMENTAL
JUSTICE CLINIC
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INTRODUCTION

The impacts of climate change are already dispro-portionate felt by People of Color, Indigenous Peo-ples, and low-income communities in Connecticut and beyond.[i] If not addressed head-on, existing inequalities will continue to limit communities' ability to adapt. A community-centered approach to planning is essential for policymakers charged with the design and implementation of equitable climate policies in Connecticut. When policy-makers acknowledge and incorporate the lived experiences and insights of those most affected by climate change, the resulting policies will address the challenges ahead more effectively and equita-bly.[ii] The research underlying this report indicates that Connecticut is currently struggling to adopt a community-based approach. This report models an approach to community engagement and presents research findings from this engagement to assist in centering communities in climate planning. The report's recommendations are intended to inform policymakers how to improve public participation processes and better apply an equity lens to their work addressing climate change.

This report summarizes the findings from a semes-ter-long study in Spring 2021, during which re-searchers engaged with communities most affected by climate change (hereafter referred to as environ-mental justice or EJ communities) in Connecticut[iii] to (1) inform the Department of Energy and Envi-ronmental Protection (DEEP) and the Governor's Council on Climate Change's Phase 2 recommen-dations on a robust public participation process and (2) offer recommendations for a proposed $25 million climate resilience program by DEEP that prioritizes projects for EJ communities. The study was completed by a student research team as part of a course offered jointly between Vermont Law School, Yale School of Public Health, and the Yale School of the Environment.

BACKGROUND

In September 2019, Governor Ned Lamont signed Executive Order 3 re-establishing and expanding the membership and responsibilities of the Governor's Council on Climate Change (GC3).[iv] The GC3 was tasked with developing and implementing both adaptation and mitigation strategies to address climate change across the state. The GC3 released a Phase 1 Report with near-term actions in January 2021. Within the GC3, the Equity and Environmental Justice (EEJ) Working Group works to engage historically excluded stakeholders in the planning process and recommend "strategies to prioritize climate change adaptation efforts to protect vulnerable communities that may be disproportionately impacted by the effects of climate change."[v] This report builds upon the EEJ recommendations in the GC3 Phase 1 Report to identify best practices for meaningful public participation and offer recommendations for how proposed resilience funds can be spent to fund climate resilience programs with a focus on "distressed"[vi] communities.

Resilience planning can be a tool for achieving equity more broadly. Our review indicated that resilience plans must prioritize equitable outcomes for those most impacted by climate change and genuine community engagement in the development, implementation, and maintenance of climate resilience planning and programs.[vii] The GC3 Phase 1 Report refers to this as "procedural equity."[viii] When considering where and how to prioritize resilience and climate mitigation efforts, projects that apply procedural equity are more likely to ultimately incorporate communities' social, political, economic, and environmental circumstances.[ix] This requires including community members from the design stage through to decision-making.

Facilitating Power, Movement Strategy Center, and the National Association of Climate Resilience Planners, in conjunction with the Urban Sustainability Directors Network Innovation Fund Project, define this approach is as "collaborative governance" or the "co-definition of problems and the co-development of solutions."[x] They posit that solutions developed collaboratively "benefit from a shared analysis of root causes and from increased capacity for implementation that can be grounded in community strengths and assets."[xi] It can be helpful to view community engagement as existing along a continuum or spectrum to recognize where an agency, for example, is on the spectrum of community engagement and help set goals to transform current systems of public participation.

The "Spectrum of Community Engagement to Ownership," shown in Figure 1, is a helpful guide for policymakers seeking to incorporate community voices in a more meaningful way than simply by informing or gathering input. Ideally, Connecticut's resilience planning will fall on the high end of this spectrum by fostering community collaboration and ownership.
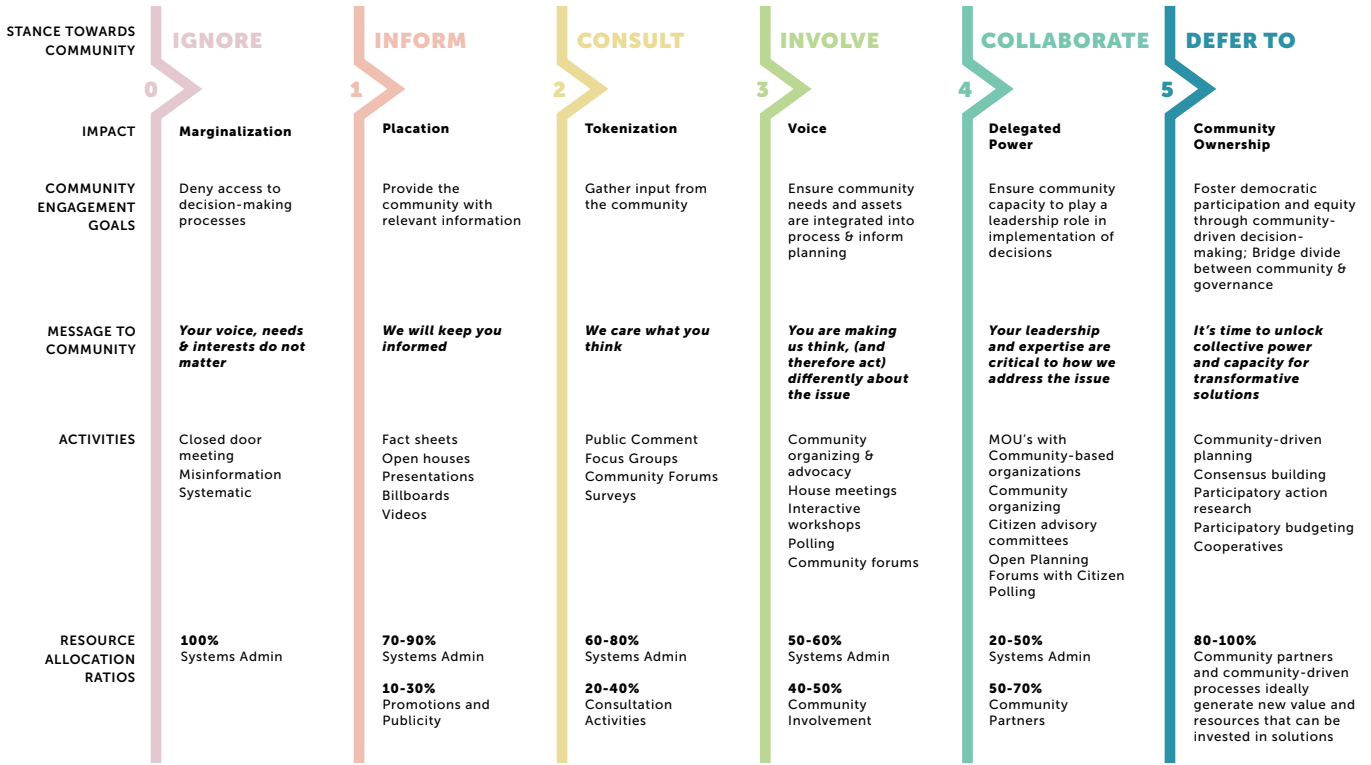
STANCE TOWARDS COMMUNITY	IGNORE 0	INFORM 1	CONSULT 2	INVOLVE 3	COLLABORATE 4	DEFER TO 5
IMPACT	Marginalization	Placation	Tokenization	Voice	Delegated Power	Community Ownership
COMMUNITY ENGAGEMENT GOALS	Deny access to decision-making processes	Provide the community with relevant information	Gather input from the community	Ensure community needs and assets are integrated into process & inform planning	Ensure community capacity to play a leadership role in implementation of decisions	Foster democratic participation and equity through community-driven decision-making; Bridge divide between community & governance
MESSAGE TO COMMUNITY	*Your voice, needs & interests do not matter*	*We will keep you informed*	*We care what you think*	*You are making us think, (and therefore act) differently about the issue*	*Your leadership and expertise are critical to how we address the issue*	*It's time to unlock collective power and capacity for transformative solutions*
ACTIVITIES	Closed door meeting Misinformation Systematic	Fact sheets Open houses Presentations Billboards Videos	Public Comment Focus Groups Community Forums Surveys	Community organizing & advocacy House meetings Interactive workshops Polling Community forums	MOU's with Community-based organizations Community organizing Citizen advisory committees Open Planning Forums with Citizen Polling	Community-driven planning Consensus building Participatory action research Participatory budgeting Cooperatives
RESOURCE ALLOCATION RATIOS	100% Systems Admin	70-90% Systems Admin / 10-30% Promotions and Publicity	60-80% Systems Admin / 20-40% Consultation Activities	50-60% Systems Admin / 40-50% Community Involvement	20-50% Systems Admin / 50-70% Community Partners	80-100% Community partners and community-driven processes ideally generate new value and resources that can be invested in solutions

FIGURE 1. Steps along the "Spectrum of Community Engagement to Ownership" from ignoring communities (a zero on the spectrum) to deferring to communities (a five).[xii]

METHODS

To connect with residents, researchers created an outreach plan alongside local leaders and community-based organizations, including the Young Women's Christian Association (YWCA), Integrated Refugee & Immigrant Services (IRIS), and the Connecticut Coalition for Environmental Justice. Serving as community liaisons, staff from these organizations assisted our team to reach communities most at risk from the impacts of climate change. Through our outreach, we recruited participants for focus groups. We conducted eight focus groups via Zoom with a total of 30 participants from the Hartford, Bridgeport, Willimantic, and New Haven areas. The purpose of the focus groups was to explore the following:

- participants' experiences in public participation processes;
- major climate impacts facing their communities; and
- participants' ideas for how to allocate state funding for increased climate resilience.

FINDINGS: PUBLIC PARTICIPATION

Focus group participants had almost universally negative experiences with community planning in the past. There were two major themes of participant feedback on public participation initiatives for community planning, summarized in Table 1, below: (1) inaccessibility and (2) lack of meaningful involvement.

TABLE 1. Summary of Community Feedback on Public Participation	
Inaccessibility	Participants noted that public participation events are not accessible due to factors including: publicity and outreach strategies, location and transportation, scheduling, language barriers, technology and internet access, lack of resources like childcare, and appropriate compensation.
Lack of Meaningful Involvement	Participants noted a lack of representation (across race and ethnicity, socioeconomic status, language and culture, geographic location, etc.) both at the decision-making table and in public participation interactions, which left people uncomfortable or unable to share their experiences in planning processes. When they had participated in the past, participants felt that they were being tokenized and that their experiences were not acknowledged or meaningfully incorporated into decision-making.

First, people were unable to join public participation events because of the physical location or online platform for the event, what language was used during the event, having a busy schedule, and/or not knowing about the events ahead of time. For example, focus group participants repeatedly discussed how difficult it was to find information about community outreach or planning events. "The resources are there, but it's hard to learn about them,"[xiii] one participant told us. People sometimes knew the information was available somewhere—for instance, buried on a town website—but they did not know where it was or how to access it. Additionally, many participants spoke about being overburdened with other obligations like work or childcare, and limited by other constraints, such as not having a car. They emphasized the lack of resources and incentives that the state currently provided:

Too many times, people of color and low-income people are pimped by organizations to get information that they need, at the expense of people who get absolutely nothing... They expect the communities to work for free.[xiv]

Across focus groups, participants mentioned that compensation is a crucial resource for increasing the participation of EJ communities in planning events.

Second, people did not see their participation in events as meaningfully contributing to decision-making; they felt that planners and policymakers were simply looking to check a box instead of incorporating the feedback they shared. Participants emphasized that gathering input should be the first of many steps in increasing people's involvement in decisions that affect their communities. One spoke on the need to integrate community voices at every stage:

I think asking community members for their input is great, but we need to go beyond that. These communities need to be included in the decision-making process.[xv]

Additionally, participants recognized when their input was truly being incorporated into decision-making and when it was being gathered for more superficial reasons. One participant called the community outreach and planning events they had attended "a farce, a charade,"[xvi] and another expressed feeling "like [their] opinion doesn't matter."[xvii] Similar sentiments arose across focus groups. People said that even when they had participated, they were not sure what the state was doing with the feedback they had provided. They expressed that by the time community meetings were held, it was clear that it was too late and that a decision had already been made.

RECOMMENDATIONS: PUBLIC PARTICIPATION

Accessibility

Focus groups participants shared ways the state could reach them and emphasized the need to use a variety of methods to connect with residents and remove barriers to participation. We recommend improving outreach strategies by using multiple outreach channels that are popular with community members, partnering with community-based organizations to reach their constituents, and identifying and removing barriers to participation.

1 Design outreach strategies to reach wider audiences

Specific communication methods that participants identified included:

- Social media including Facebook, Instagram, NextDoor, and Twitter,
- Physical flyers at people's doors, as well as public and frequently visited places in the community including public libraries, clinics, community centers, and places of worship,
- Newsletters and independent newspapers, including the New Haven Independent, La Voz, InnerCity, and other Black/Latinx-run publications,
- Radio stations,
- Tables at farmers' markets and other local events, particularly in rural areas.

Additionally, community-centered organizations and local leaders may be helpful with outreach, as they are regarded to be trustworthy and reliable by residents. Some examples of community-centered organizations and local leaders identified in this study include the YWCA, IRIS, Semilla Collective, and Unidad Latina Acción, CT Equity Now, and local elected officials.

2 Address participation barriers through inclusive practices

Participants identified barriers to participation and suggested measures the state can take to remove those barriers, including:

- A combination of virtual meetings, accompanied by training sessions and information on how to use Zoom, and in-person meetings, particularly in and around neighborhoods most affected by climate change,
- Holding events in locations easy to access through public transportation or within easy walking distance of affected communities,
- Childcare, or providing activities suitable for children,
- Compensation for participants including money, gift cards, hearty meals, diapers for families, and other necessities,
- Translation and interpretation solutions for non-English speakers, including sessions held in their native language,
- Use of accessible language, with attention to the readability of written materials, lack of acronyms and translation of technical jargon into plain language, and
- Scheduling events at a variety of days of the week and times of day.

Inclusive Decision-Making

Meaningful community engagement requires steps beyond simply ensuring that community members can be in the room or on Zoom for the conversation. Increasing diversity and representation at the decision-making table, ensuring multiple opportunities for community input, and investing in ongoing relationships with community organizations and residents to build trust over time will go a long way to deepen the quality of community engagement.

1 Increase diversity and representation throughout the entirety of the decision-making process

DEEP can increase representation for EJ communities in decision-making by hiring people from those communities within its agency and supporting other state agencies and municipal governments to do the same; including them in formal, voluntary state-led processes like the GC3; and forming partnerships with community-based organizations to conduct public participation processes for climate planning purposes.

For communities to feel as comfortable as possible at public participation events, the people organizing and conducting the events should also have a stake in the community and represent the members they are attempting to reach. In cases where this is not accomplished, those convening and/or leading the discussion must acknowledge their positions of privilege and commit to actively listening to and respecting the identities and experiences of community members. Additionally, they must be mindful of prejudices that they may have about participants' level of knowledge on these issues. Community members know their communities and the issues they face best; while information must be accessible in terms of readability, it must also be respectful of people's knowledge and lived experiences.

2 Foster meaningful involvement by valuing resident feedback

We additionally recommend incorporating community feedback into every stage of the planning process. Communities need to see meaningful involvement from the start to finish in climate planning—from identifying the problems and potential solutions to developing plans and implementing

them on the ground. Throughout this process, policymakers should recognize that building trust will take careful investment, increased resources, and effort to show communities that their engagement will have real impacts.

3 Ensure that public participation is an ongoing relationship

Our final recommendation for more inclusive decision-making is to follow up with participating community members after initial contact. Public participation is not a one-time event; it is an ongoing relationship that requires consistent attention and care. Follow-up allows decision-makers to process the input that communities have put forward. It also allows communities to feel that they are being listened to, and it gives them a way to hold decision-makers accountable for incorporating their input into policies and programs. The state can build on the outreach methods mentioned above to provide updates and follow up with participants.

Just partnerships with community-led organizations and local leaders can provide some of the infrastructure through which to interact and build relationships with community members, as these are trustworthy and familiar figures who have already created a foundation for community engagement. By "just," we mean partnerships that are compensated (perhaps through resilience program funds) and mutually agreed upon through equitable contracts.

FINDINGS: COMMUNITY IMPACTS OF EXTREME WEATHER EVENTS

Focus group participants—especially those who identified themselves as members of EJ communities—felt they lacked information and access to the aid they needed during and after extreme weather events, including hurricanes, floods, winter storms, and heat waves. Extreme weather events impacted access to electricity, transportation, clean water, and clean air, which endangered their health and burdened them with unexpected financial costs. Table 2 summarizes participant feedback on the high-priority climate change-related impacts that their communities face.

TABLE 2. Summary of Community Identified, High Priority Impacts of Extreme Weather Events	
Energy Security	All focus groups, particularly participants from EJ communities, highlighted power outages as an issue, with trickle-down impacts including: human health (refrigeration for medication; life-sustaining electronic medical devices; heating and air-conditioning for vulnerable community members; lack of access to green spaces for relief from extreme heat), food security (spoiled food due to lack of refrigeration), and communication (inability to charge devices to call loved ones or access crucial information about emergency response resources).
Food Security	Participants emphasized food insecurity (i.e., lack of access to healthy and affordable food options) and identified concerns about convenience, transportation, affordability, availability, and quality of food both in everyday life and in the aftermath of extreme weather events. Losing food from lack of refrigeration due to power outages was a particular concern. Participants described having to choose between paying bills and purchasing food, having to either purchase more expensive take-out or pay increased delivery fees, and having to travel farther when gas prices were higher due to living in areas with decreased access to healthy and affordable food.
Transportation	Participants noted that access to transportation and affordable fuel during extreme weather events is critical for staying warm, acquiring food, charging devices, and more. Additionally, they noted that the delayed response time of snowplows in their areas created dangerous driving conditions for those who still need to work, despite weather conditions.
Clean Water	Participants, particularly those from EJ communities, noticed a decrease in water quality during and after extreme weather events but were unaware of the root cause (i.e., poor infrastructure; combined sewer overflow events).
Clean Air	While participants showed a greater concern for other issues, they raised some concerns about poor air quality and increasing rates of asthma in their communities, particularly in the context of extreme heat events.

Of the five issues above, the focus group participants spoke most about power outages and food insecurity. These two topics are discussed in greater detail below.

In all focus groups, participants from EJ communities emphasized the problem of power outages. They explained that outages caused a range of adverse impacts, including to one's health, food security, and access to communication. One participant described how their community experienced frequent power outages, while a more affluent community nearby consistently had more reliable access to electricity: "We would have the power out for days at a time, and their power would literally never be out."[xviii] Our research suggests that EJ communities deal with more frequent and prolonged blackouts—sometimes five to seven days in length. One participant stressed that power lines should be buried underground. The participant stated:

> *They lose their food, they lose their heat, they lose their health, they're at risk, they lose their medication... Why? Because the power lines are not underground. So, if it's a densely populated area, they need to put those power lines underground.[xix]*

Flooding, combined sewer overflow events, and access to a clean water supply were significant issues for some residents. Bridgeport participants specifically reported experiencing hectic flood events and often relied on their neighbors for support. New Haven residents likewise spoke about "full moon flooding," which are chronic flooding issues that occur on a monthly basis in communities located in low-lying, tidal or coastal areas. Conversely, participants in another focus group had concerns with drought and the local reservoir supply in New Haven. When water supplies were scarce in some communities surrounding Hartford during extreme climate events, participants reported having to shower at the local school facilities. Other participants also noted that sewers and combined sew-

er systems that collect both rainwater runoff and household and industrial sewage were issues—and can result in discharge of untreated waste into water bodies (i.e., combined sewer overflow events)—in their neighborhood.

> *Everybody's basements were flooded in the North End of Hartford, South End of Hartford... the water district basically told us there was nothing they could do [and] other folks didn't know who to call about four feet of water in their basements, and then you read the next day, that people in West Hartford not only got combined sewage overflow valves in their basement, but the [Metropolitan District] paid for them to stay in hotels. Nobody ever suggested that I stay in a hotel.[xx]*

Another public health concern amongst participants in several focus groups was safety and comfort during extreme heat events. Participants noted that access to air-conditioning or cool spaces for relief during very hot days was important, as one participant recounts their experience in first coming to America from Russia:

> *When my first son was born... it was an extremely hot summer [and] the house was not holding the air from the air conditioner all that well, so the electric bills were soaring, and it was still not cool enough, the newborn baby was suffering because of it. Crying nonstop, there was nowhere for us to go. That was the hardest moment I can remember.[xxi]*

Participants noted their experience in New Haven as the pandemic prevented them from being able to gather outside in public spaces. One participant explained that the combination of the extreme heat, deadly pandemic, and sewage overflow made for an uncomfortable and expensive summer:

I have a beach in my town, but last year the sewage leak and the raw sewage got in the water and all the beaches were closed for several days. So not just heat, not just the pandemic, but bacteria in the water as well. Because of the heat, bacteria were growing so fast and made the conditions not great.[xxii]

Residents from East Haven also spoke to the air quality in their town, noting that poor air quality has contributed to increased rates of asthma in children around the area.

Other participants emphasized the importance of disaster preparedness in both infrastructure and individual families. For example, one participant recommended that the state support residents in obtaining *"emergency kit[s] and make sure you have that readily available before the storm arrives because you never know how long you'll have to go before receiving relief."*[xxiii] Another suggested the *"fortif[ication of] the homes of low-income people, as well as people with disabilities,"*[xxiv] citing earthquake retrofitting undertaken by the City of Los Angeles.

Because one of the major trickle-down effects of power outages described was increased food insecurity, participants also discussed their experiences at the intersection of the two issues in depth. One participant spoke about her close family friend who had purchased a large order of groceries the day prior to a major storm: *"I know one family that had spent $300 on food before the storm, and they lost that. They had to not pay a bill in order to replace that food."*[xxv] When they lost power during the storm, they lost almost their entire grocery run—money they did not have to spare. This quotation highlights the gravity of the situation—the family had to choose whether to pay a bill or feed their family members by replacing the lost groceries.

RECOMMENDATIONS: COMMUNITY IMPACTS OF EXTREME WEATHER EVENTS

To address these major climate impacts, we recommend the following actions to increase disaster preparedness: improve physical infrastructure, bolster food security, and educate community members and leaders on climate change and its impacts. Each of these strategies has benefits to community resilience, public health and wellbeing, and economic stability, but would require significant engagement to ensure that proposed solutions match community needs.

Disaster Preparedness & Response

During the focus groups, it was universally acknowledged that participants did not have access to the resources or information they needed during or in the aftermath of extreme climate events. These recommendations are a starting point to bridge those gaps.

1 Proactively educate and provide emergency kits to residents in need

We suggest that the state foster relationships with community organizations, like IRIS, to proactively educate people on disaster-related resources and disseminate emergency preparedness kits. Such kits might include flashlights, batteries, blankets, can openers, and other basic necessities, as well as a list of resources and how to access them in case they cannot charge their devices.

2 Improve information dissemination during extreme climate events

We also recommend communicating disaster-related information with residents before, during, and after disasters by using a variety of communication methods. The information needs to be culturally and linguistically accessible. Suggestions include text alerts, such as those used by New Haven and some schools; having utilities turn back on power and/or cable for users, regardless of payment status, in times of disaster or evacuation; and ensuring community members can charge their phones.

3 Provide backup power solutions to residents who are in need

Immediately after extreme weather events, access to relief and power are key priorities for food security, health, and access to information. Therefore, we suggest improving lines of communication between utilities and residents so that people are better informed about when they can expect their power to return and are able to plan accordingly. We additionally recommend providing mobile shelters, resilient community centers, funded hotel stays, or other shelters run by community-based organizations, emergency services, or local businesses to ensure residents have access to refrigeration, heating or cooling, Wi-Fi, and charging stations.

Infrastructure

Focus group participants expressed the need for infrastructural investments to reduce risk from increased frequency and severity of storms and to ensure ongoing access to clean water. They pointed to actions including flood risk mitigation, building weatherization, and addressing the impacts of CSOs, as well as investment in tree canopy.

1 Invest in flood mitigation to improve resilience to storm-related impacts

Participants are seeking improved resilience to storm-related damage, with steps such as:
- Adaptation plans for rivers such as the Quinnipiac and Mill Rivers, which will have an increasing impact on communities in the face of sea level rise and high precipitation events.
- Flood mitigation strategies, including investment in wetland restoration, managed retreat processes, and relocation from high-risk areas where necessary.

2 Invest in energy systems to improve resilience to storm-related impacts

Participants raised significant concerns about power outages and the need to move power lines underground to decrease instances of storm-related power outages. Moving power lines underground should be prioritized in urban BIPOC and low-income communities. Participants also expressed significant interest in ensuring that solar technology and battery storage are accessible for BIPOC low-income communities, including policies that allow residents to go off-grid in the event of a power outage.

3 Fortify/weatherize homes, prioritizing low-income, BIPOC, and persons with disabilities

Weatherization (such as adding insulation and replacing leaky windows and doors) not only makes homes more energy efficient but also make them better able to maintain a comfortable temperature during hot and cold weather extremes, including during power outages. Therefore, we recommend that weatherization be classified as a climate re-

silience action, and that weatherization programs prioritize communities most impacted by climate change, in particular, low-income and BIPOC communities and persons with disabilities.

4 Address Combined Sewer Overflows (CSO) and educate community members on the issue and possible solutions

Six Connecticut municipalities still have combined sewer systems: Bridgeport, Hartford, New Haven, Norwalk, Norwich, and Waterbury. We recommend that more community engagement occur around decision-making on the current combined sewer systems, including related to zoning and land use issues. To support residents to engage on this technical issue, education should be provided on how these systems are built and the possible design solutions that can be implemented.

5 Invest in tree canopy, cooling centers, and other strategies to mitigate the cumulative impacts of extreme heat and poor air quality

Increasing opportunities for tree plantings and supporting pedestrian- and cyclist-friendly infrastructure in neighborhoods brings multiple benefits. Both reduce greenhouse gas emissions and also improve local air quality, especially during extreme heat events. Many participants also identified need for public cooling centers available for populations who could not afford air conditioning.

Food Security

Participants identified food insecurity as a chronic issue that is worsened by extreme weather events and energy insecurity, while investments in food access and food security emerged as a resilience strategy.

1 Improve access and affordability of local, healthy food options in food insecure areas

We recommend incentivizing farmer's markets by fostering partnerships with organizations or local farmers. Healthy food options should be affordable and available on a regular basis. Affordable food options should be well advertised through flyers and signage. Moving farmer's markets indoors during winter months can also promote year-round accessibility, especially in food insecure areas.

2 Partner with delivery services and subsidize delivery fees for participants using SNAP benefits or otherwise residing in food insecure areas

As many residents living in food insecure areas reported utilizing delivery services such as Instacart, partnering with them or similar companies to subsidize delivery and service fees for customers using SNAP benefits could help address issues with food access.

3 Improve accessibility and affordability of community gardens in food insecure areas

We received a great deal of interest in community gardens and mixed feedback related to accessibility, affordability, and feasibility. Therefore, we recommend bolstering DEEP's urban community garden program and developing solutions to concerns about expense, expertise, and time needed to participate in community gardening.

Climate Education

1 Create a climate change educational campaign

Focus group participants overwhelmingly supported the idea of state climate funds being invested in more public climate change education campaigns. One participant perfectly summarized what many focus groups had expressed:

"Education is the most important thing! If you don't know [about climate change], how are you going to do something about it?"[xxvi]

Therefore, we recommend developing a proactive climate education campaign. Specifically, we recommend that the state work with local schools, camps, and community centers to implement educational programs on a range of climate-related issues including but not limited to food security, environmental science and health, environmental justice, disaster preparedness, renewable energy, and everyday sustainable practices, such as composting, gardening, and water conservation. These programs should include hands-on activities that students can take home to share with their families and friends, which would aid in spreading the information throughout the community. All communities should have equal access to quality programming; for instance, if run through the school system, program quality should not differ between public and private schools.

Additionally, participants pushed for more paid internship and mentorship opportunities in green jobs and with environmental organizations; they wanted these opportunities to be specifically geared towards young people of color to increase representation in the sector and help secure future employment for youth in these communities. The state should encourage paid internships and other mentoring opportunities for young people from underrepresented groups in the environmental field, to foster curiosity and allow youth to get practical work experience for future employment in green jobs.

CONCLUSION

Though decision-makers often label EJ communities "hard-to-reach," our research team found these communities to be highly invested in climate-related issues and action. Researchers were able to reliably connect with community members by using multiple channels of communication and partnering with community liaisons, without whom this project would not have been possible.

Furthermore, this research confirms that climate impacts are disproportionately affecting BIPOC and low-income communities across Connecticut. Repeatedly, participants who identified as being part of these communities reported higher instances of power outages, food insecurity, and lack of access to basic resources needed to remain safe during extreme climate events. Meanwhile, residents who reported being comfortable during extreme climate events typically resided in areas that were either whiter or more affluent. EJ communities should be afforded the same respect and resources extended to other communities in Connecticut. The recommendations included in this report only skim the surface of what needs to be done.

APPENDIX A: GLOSSARY

Term	Abbreviation	Definition
adaptation	--	(in the context of climate change) "In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects"[xxvii]
climate change	--	long-term changes in local, regional, or global average weather conditions, such as temperature and rainfall; caused by increased greenhouse gas emissions primarily due to human activity, particularly the burning of fossil fuels and land-use change[xxviii]
climate justice	--	a framing of the issues and causes of climate change that "links human rights and development to achieve a human-centered approach, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly"[xxix]
Department of Energy and Environmental Protection	DEEP	Connecticut agency tasked with overseeing the state's natural and energy resources, protecting and enhancing the natural environment and public health, regulating public utilities, and managing energy policy issues
distributive justice	--	fairness in the allocation of burdens and benefits[xxx]
energy burden	--	percentage of gross household income spent on energy costs[xxxi]
energy insecurity	--	"inability to adequately meet basic household energy needs"[xxxii]
environmental justice	EJ	"fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies"[xxxiii]
Governor's Council on Climate Change	GC3	a 23-member group with representation from the Connecticut state and local governments, the private sector, and civil society advising the Connecticut governor on climate mitigation and adaptation policies; re-established and expanded by Governor Lamont's Executive Order 3 in 2019[xxxiv]

Term	Abbreviation	Definition
fossil fuels	--	fuel formed by the decomposition of organic matter; human use (burning) of fossil fuels for energy emits greenhouse gases and is a leading driver of climate change; considered neither clean nor renewable, as they release greenhouse gases and other air pollutants and are depleted at a much rate faster than they are formed[xxxv]
greenhouse gas	GHG	gas that absorbs and re-emits infrared radiation, resulting in the greenhouse effect; increased atmospheric concentration of greenhouse gases due to human activity has led to raised global mean temperature in recent decades[xxxvi]
mitigation	--	(in the context of climate change) "human intervention to reduce emissions or enhance the sinks of greenhouse gases"[xxxvii]
procedural justice	--	fairness in decision-making processes[xxxviii]
resilience	--	(in the context of climate change) ability to prepare for, recover from, and adapt to climate change impacts[xxxix]

APPENDIX B: PROPOSED RESILIENCE SPENDING RESPONSES

The following collection of quotes are from focus group participants, in response to posed priority question.

Priority Question: If you had complete control over how the $25 million dollars are spent, how would you choose to spend the money to better prepare your community for climate change?	
Energy & Transportation	• "POWER LINES UNDERGROUND. Put that in all caps. They lose their food, they lose their heat, they lose their health, they're at risk, they lose their medication… Why? Because the power lines are not underground. So, if it's a densely populated area, they need to put those power lines underground." • "I would like to add that I believe there should be solar panels available to everyone. For example, in South America, my parents are from Chile, everyone has access to solar panels, even the very low-income families." • "I would also establish houses with solar energy. So if a storm comes, electricity remains available." • "Especially with solar panels, some states will put it on for free – heavily subsidized solar paneling. And I don't really see that here." • "I'm worried about diesel cars, I'm worried that they pollute the air a lot, and something has to be done about deforestation because I feel that these days more trees are being cut than are being planted. A lot of trees are being destroyed and we do not have enough trees to give us fresh air." • "I would do a two-part project. The first one is to do solar power incentives in order to allow people to convert their electricity to solar energy." • "I think we should rely on transportation or once again the 911 reverse system, or some kind of robocall where people can be called and told where the shelters are." • "Something that we talk about a lot in my community is how we want to use bicycles instead of cars because we know cars contribute a lot to climate change. I would spend the money on providing bicycles to more people, personally I don't have a bike, but if I did, I would use it to go to the laundry, to the grocery store. Since I don't have a bike, I have to ask people for a ride. I also feel like the city buses are very old because I always see the black smoke coming out of them, which makes the air quality even poorer than it already is." • "Where my family lives [in Chile], everyone drives electric cars, but here our community cannot afford hybrid cars. They're too expensive."
Infrastructure & Adaptation Efforts	• "Well, we would have to look at what happens the most in these climate catastrophes. Flooding, relocation, transportation, loss of electricity, food resources to people to be delivered to their homes. If it's a system where you get the food banks to pull together and the city buses to deliver to neighborhoods. If it's clean water, you're going to have to figure out how to get water to the people. The natural inclination is to PUT IT UNDER GROUND." • "I think that we should really prepare individuals beforehand, get that emergency kit and make sure you have that readily available before the storm arrives because you never know how long you'll have to go before receiving relief. I think we should really work on preparing people for national disasters."

Priority Question: If you had complete control over how the $25 million dollars are spent, how would you choose to spend the money to better prepare your community for climate change?

- "I would fortify the homes of low- income people as well as people with disabilities. LA does a lot retro-fitting homes for earthquakes so I would do something similar, and I would do that for the resources in communities, retrofitting the clinics, the libraries, weatherizing as much as possible. And then also setting aside funding for hotels, for repairs, etc. for any anticipatory needs. Saving the rest of the money to fill in those gaps when we get there."

- "Exactly what change are we anticipating, and that's what we need to prepare for."

- "If we had better social infrastructure, (similar to a reverse 911 structure). I would love to see that in general. People who want to bring resources connected to those who need resources. Incentivizing this structure."

- "I'm a fan of Andrew Yang's minimum income for all citizens. That would be a good way to approach the homeless problem. People certainly aren't going to get rich off of it, but some will use it, and some will abuse it, but most would probably use it to advance their lives."

- "And something that a lot of people overlook, in regard to conversations about affordable homes, and nobody is talking about the contaminated soil that is on and around public housing. When we talk about Munson Street, Dixwell Plaza, all of that is contaminated soil. We are building structures and we are asking people to live on this and that is not okay."

- "How easy and inexpensive to give everyone flashlight batteries, some cans of food and a can opener. They could just give it out at the schools, like they do now with COVID... This is very essential. And they could do this in the neighborhoods, everyone gets this basic kit with numbers to call... I don't know, that would be such a great use of our tax money."

- "And got these lights that you can just charge and plug in, they lasted 24 hours. You can have those battery packs where you can charge your phone, charge your lights, they can give out smoke detectors, they can give out those rechargeable lights!"

- "We have to have some kind of system where somebody can actually call and touch base with all of our seniors and people that are disabled and make sure that everything they need is taken care of and that they aren't there alone."

- "It's very difficult to tackle such a huge issue as climate change at the local level... people have been talking here about problems with food, electricity, etc. Have an emergency center where people could come. A place where they could bring their food, a place to charge their phones. Also in the heat, a place for people to cool off. That they could work from. A place where they could get a generator from. Some kind of emergency center where people could call or come to get what they need. Electricity, freezers, access to food places."

- "Create a safety bag for your home and also in the army, they have the emergency survival kits, we could create something like that."

- "I would build 6 resource centers. I would put those in 6 different areas of CT. Safe to immigrants, in terms of your information, that you will treat everyone the same. Keep information safe. They would be equipped with generators, food supplies...They're going to be warm; they got to have rules for people (like house rules) a nurse on staff in case anyone gets sick. Doctors can come in cases of extreme emergency. Areas that aren't flood prone. Language center is there as well. And I would run these things all year long.

Priority Question: If you had complete control over how the $25 million dollars are spent, how would you choose to spend the money to better prepare your community for climate change?

	And I would expand IRIS and fund them. IRIS would be one of my six resource centers; the setup of IRIS would be the model for this. They treat us like family, that is what we are looking for." • "One recommendation is care packages providing food, candles, hygiene products…having a blanket in the car. Things like that, that come in handy, but we forget after a while." • "I really wish we had the Hefty energy bag program." • "And it's super hard in this community, most people, if they have recycling, it's basic recycling. And people don't know what they can and can't recycle. And also community compost. In some places we do have this, but they're not super accessible like they are in other cities." • "How the 5G radiation is affecting the environment. That is not part of the environmental conversation and should be. There is a lot about that subject that is not included in the environmental movement. Radiation and how that is affecting life, the biology of people in these communities. It's huge and not included, for the record, I would love that you guys include that we need to talk more about regulating telecommu-nications. Include that as a huge environmental concern. Health effects of radiation are a big deal. How radiation is affecting us and our grandchildren."
Mitigation Efforts	• "I would honestly invest more in green spaces and community gardens. As things get hotter, green areas soak up some of that heat. And if you turn these spaces, like abandoned parking lots, instead of turning them into bougie apartment complexes, turn them into community garden areas, where it's a center for people to gather. And save some of that extreme heat during the summer months." • "This is something I need to learn more, but instead of working on the consequences of the climate issues, I think money needs to be invested more on what is causing the problem." • "We have a lot of community trouble creating more damage to the climate, but not enough investment in mitigation efforts. Just dealing with the consequences, not the root of the problem. I don't know exactly what is to be done, but I think that is an area of top priority. How we can diminish what is causing climate change." • "I think it's important to educate people about the water levels and how they are rising. Here in my town we have an airport surrounded by wetlands. Yes, there are also a lot of rivers here and they are all con-taminated, and the quality of the water is very low and along with the facts that the sea level is rising, the fact that the city wants to develop all of the green spaces (wetlands) to make the airport bigger, etc. is problematic. I don't think that's a good future for my children." • "Also, I think it's very important to get the youth involved in the topic. When I was in high school, I re-member. there was no talk about this. And how the environment is being impacted. A lot of people don't realize how grave this issue is. We are second place in the world when it comes to garbage production. It's a very grave issue which a lot of people just don't know about. We also consume a lot, we constantly buy things, like shoes, clothes, everyone feels like they need more. We should learn more from Latin America where people use every single clothing item until it is worn out and cannot use it anymore. They probably buy only a few shirts a year."

Priority Question: If you had complete control over how the $25 million dollars are spent, how would you choose to spend the money to better prepare your community for climate change?	
Employment & Policy	• "And also green jobs, where are the green jobs for our communities? I just read that in Connecticut, only 5% of the jobs are green jobs, and the Spanish speaking community are usually involved in the most delicate jobs, and they will need new occupations." • "Green plan, we are trying to prevent global warming, but we need to stop polluting. When the problem started, we didn't stop. And now that things are going wrong, we're not preventing ourselves." • "I would also talk about the prices for coal (carbon pricing) and the laws that exist on the local and federal levels and the laws that exist on this. This topic is so complicated, and we need to educate on this and make sure people understand what is going on." • "Green plan should be adopted. Connecticut should take that plan seriously."
Education	• "We need degrees for our young people and people mentoring them in these organizations that are actually working in climate change. You have to start with young people." • "Contribute some of the money to the local school system to do environmental justice curriculums." • "Education. On environmental sciences. One of the most important things that I remember learning in college in an earth science class is a professor saying never buy or build a house on a flood plain. Which essentially means, seek higher ground for your home. And so education about all these issues, how to use less energy, food, everything, riding a bike, etc." • "I think it would be good to have different stakeholders drawn in to decide on what to do. If it was just me, education, but I have trouble with how education is defined... it can't just be logical, it needs to be impactful. And encouraged. Encourage conservation. Education needs to look like a campaign to encourage conservation." • "We can make programs that deal with if something happens (storms, etc.), we need to educate people on how to deal with these situations. If we educate people how to deal with these things, we will know how to survive... teach people how to do CPR, how to deal with injuries. Prioritizing safety and education. In school and outside of school. Not only the student, but ALL the people." • "If I did have this money, all the schools would be the same everything available to people. The people who don't have money cannot go to private schools but should have access to the same education." • "And speaking about recycling, I would like to mention that I think people need more education classes on recycling so that they know for sure what can and can't be recycled. I know for sure that some people don't know a cardboard box can be recycled." • "There was a big ordeal about water. The water that was flowing through our systems, our pipes and things. I remember watching a documentary about it, how water affects our skin, hair, and bodies. There's not enough talk about that. About how it relates to our bodies and health. What do we use if something is going on like that? There's not enough talk in my town about those water issues, and sometimes I just pause and think what is that doing to my skin? What are the impacts and how can we as a community be aware of what we are doing to our bodies? Some people health and insurance-wise cannot go somewhere to learn about these things, they can't go to the dermatologist. It just goes beyond food or education, it's everything in one. The education piece of it is the most important."

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