Environmental Health and Drinking Water Branch

2020 Public Health and Safety Measures

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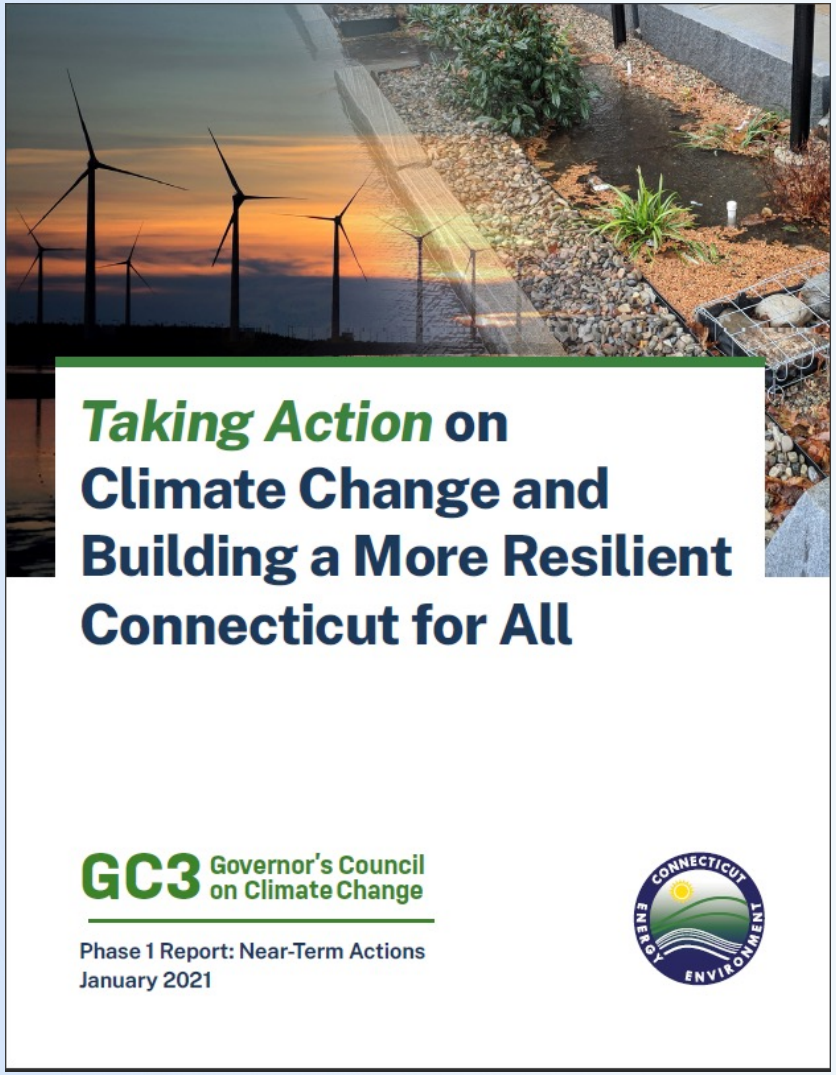
Agenda

- EO- 3 (2019)
- GC3 Structure
  - Two subcommittees
  - Seven working groups
- Public Health and Safety Recommendations
  - Develop a coordination framework for public health and safety
  - Prepare Connecticut for vector-borne diseases
  - Prepare public water systems
  - Include vulnerable populations in planning

GC3 Phase 1 Report



- EO-3
  - https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-3.pdf
- A 57-page report published in January 2021
  - https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3_Phase1_Report_Jan2021.pdf
- 61 total recommendations
  - 4 recommendations (51-54) developed by the Public Health and Safety Working Group

GC3 2020 PH&S Working Group Draft Report

- Met from April to November 2020
- Over 40 stakeholders
  - Laura Hayes provided extensive assistance and research to the group
- Meeting agendas and minutes can be found online: https://portal.ct.gov/DEEP/Climate-Change/GC3/Subcommittee-and--working-groups
- *Public Health and Safety Working Group Report to the Connecticut Governor's Council on Climate Change*, Nov 2020.
  - https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3_Public_Health_Safety_Final_Report_111020.pdf

Health Equity Lens

- **EO-3, 4a**
  - "Prioritizing, integrating, and advancing equitable distribution of the costs and benefits of climate change mitigation planning and policies, specifically addressing disproportionate impacts of such strategies on environmental justice communities."
  - Requires providing an Adaptation and Resilience Plan with "recommended strategies to prioritize climate change adaptation efforts to protect vulnerable communities that may be disproportionately impacted by the effects of climate change."
- **GC3 Phase 1 Report**
  - Charge to all working groups to look through equity lens when developing all recommendations
- **Public Health and Safety Working Group Report**
  - All 33 recommended implementation actions developed with a health equity perspective and provide protection to vulnerable communities

Four Public Health and Safety Recommendations

1. Develop a coordination framework for public health and safety
2. Prepare Connecticut for vector-borne diseases
3. Prepare public water systems
4. Include vulnerable populations in planning

Develop Coordination Framework for PH&S

- **Develop a coordination framework for public health and safety priorities with a focus on the intersection of health equity and climate impacts**, including addressing heat-related exposure, response and illnesses; ozone and allergen monitoring and impacts; food security; and needs of mental health populations in disaster response.

Coordination Framework for PH&S (cont.)

- Develop guidance for schools, day cares, and youth sports teams for prevention of heat-related illness and death.
- Address heat exposure and prevent heat-related illnesses at outdoor worksites and at indoor facilities where potential heat-related hazards may exist.
- Establish evidence-based standards for local heat and air quality response plans.
- Protect low-income residents and renters, particularly those in government supported housing, from indoor heat exposure.
- Evaluate ozone alert education efforts.

Coordination Framework for PH&S (cont.)

- Increase airborne allergen monitoring.
- Estimate the impacts of climate change on 2030 and 2050 ozone levels in Connecticut and identify potential effects on the health of Connecticut residents.
- Develop state and regional food security action plans to mitigate the risk of climate change and extreme weather events on the food system.
- Establish best practices for disaster case managers for addressing needs of mental health populations in disaster response.

Prepare CT for Vector-Borne Diseases

- **Prepare Connecticut for vector-borne diseases expected to increase with a changing climate** through improved state coordination, strengthened monitoring, improved modeling, developing prevention and management guidelines, and vector control and management.

Prepare CT for Vector-Borne Diseases (cont.)

- Strengthen monitoring and surveillance of vector populations and associated vector-borne diseases.
- Assess and project the impacts of climate change on ticks, mosquitos, and vertebrate hosts using mathematical models.
- Develop vector-borne disease prevention and management guidelines for schools, outdoor recreation, and homes.
- Evaluate vector control strategies and ensure support for implementing sustainable vector management programs.
- Monitor insecticide and antimicrobial resistance in vector populations and vector-borne pathogens.

Prepare Public Water Systems

- **Prepare public and private drinking water systems for climate impacts**, including utilizing geographic information systems (GIS); developing guidelines for drought management, engaging in planning and vulnerability assessments; tracking impacts; and incorporating resilience into laws, policies, and regulations.

Prepare Public Water Systems (cont.)

- Develop water conservation measures and communication guidelines to manage droughts.
- Develop 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.
- Update planning guidelines, drought triggers, and drought response protocols at least once per decade.
- Develop emergency interconnections between PWSs to ensure that multiple sources and interconnections are available for mutually beneficial sharing of water during emergencies.

Prepare Public Water Systems (cont.)

- Use source water protection and the Drinking Water Quality Management Plans to encourage resiliency and increase funding and support for investments in watershed protection.
- Develop a statewide GIS database and framework for continued updates that identifies the location of private wells and decentralized sewage disposal systems.
- Track harmful or potentially harmful cyanobacteria algal bloom data in Connecticut and provide technical assistance to community water suppliers to address and prevent these events.
- Assess the vulnerability of public recreational freshwater and marine beaches to impacts from climate change and prioritize adaptation options to reduce vulnerability.
- Develop an energy audit program for water systems (water and wastewater) to increase energy efficiency and reduce greenhouse gas emissions across the water industry.

Prepare Public Water Systems (cont.)

- Identify and improve wells that are located within a flood zone to increase resilience and reduce risk of flooding.
- Incorporate resiliency into the consideration of new laws, regulations, and policies and promote greater education of PWS about the importance of resiliency, specifically:
  - Regulate the construction of public water supply wells in flood zones.
  - Develop guidance for local land use commissions on revising regulations to make well construction in flood zones more stringent.
  - Incorporate a resiliency metric into the sanitary surveys through the small system CAT ("scorecard") and monitor results over time.
  - 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.

Include Vulnerable Populations in Planning

- **Plan for the emergencies related to the impacts of climate change and ensure the incorporation of vulnerable populations into the 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.

Include Vulnerable Pops. in Planning (cont.)

- Create and maintain 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.
- Enhance 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.
- Coordinate 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.

Include Vulnerable Pops. in Planning (cont.)

- Complete the draft State Evacuation Response Framework.
- Develop emergency interconnections between public water systems to ensure that multiple sources and interconnections are available for mutually beneficial sharing of water during emergencies.
- Establish best practices for disaster case managers for addressing needs to mental health populations in disaster response.

Questions?

References

- CT Public Health and Safety Working Group. 2020. “Report to the Connecticut Governor’s Council on Climate Change.” https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3_Public_Health_Safety_Final_Report_111020.pdf
- French, Rebecca, Alanis Allen, and Alec Shub. 2021. “Taking action on climate change and building a more resilient Connecticut for all: Phase 1 Report.” https://portal.ct.gov/DEEP/Climate-Change/GC3/Governors-Council-on-Climate-Change#:~:text=Taking%20Action%20on%20Climate%20Change,also%20known%20as%20the%20GC3