



# Climate Change in Connecticut: *From A Citizen Science Perspective*

(Research and Photojournalism)



# Introduction

East Shore District Health Department initiated a Climate Change Awareness Project in collaboration with National Environmental Health Association (NEHA) , Yale University and Connecticut Association of Directors of Health (CADH).

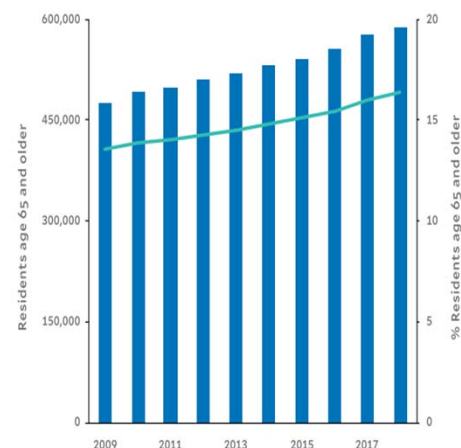
- The project has evolved to include citizen science through personal historical experiences and observations.
- Connecticut residents were invited to participate via survey response.
- Other related projects: Solar Pump-out Boat, Eco-survey of the Thimble Islands.

Through interviews and written accounts, Connecticut residents and Stakeholders shared experiences.

Combining climate change research, effects and potential opportunities in living with current and anticipated changes, a research-based photojournalism project is presented.

# Demographics of the District

- Higher percentage of aging residents than in other areas of the state:
  - Branford 21.5%,
  - East Haven 18.8%
  - North Branford 21.1%
  - CT 16.8%
- This is the most vulnerable population to climate related illnesses and stressors



**FIGURE 10:** Connecticut residents age 65 and older, 2009-2018. Bars show the total number of residents age 65 and older; solid line shows residents age 65 and older as a percent of total state population. Data source: (65).

Climate Change and Health in Connecticut 2020 Report (Yale University School of Public Health)

# Climate Change Project Team

## **Sponsors - ESDHD:**

Michael Pascucilla, M.P.H., REHS, DAAS, CEO/Director of Health  
Alex Cinotti, M.P.H., RS, Assistant Director of Health

## **Intern Researchers:**

Caroline Erickson, Yale University  
Stanley Ozogbo, MBBS, East Tennessee State University  
Heather Soroko, MPH, University of New Haven

# Project Origins

- The genesis of the Climate Change Awareness Project became apparent when it was identified that climate change was not well understood in the community.
- There was a lack of a sense of urgency around climate change.
- ESDHD recognized the need to increase the conversation around this critical topic.

# Project Objectives

## **The objectives are:**

- Promote public awareness (emphasis added)
- Empower our communities through informed decision making
- Creating resiliency in managing the impact and potential effects of climate change

# Citizen Science

- Citizen science refers to the participation of the public in engaging and contributing to the sharing and acquisition of information.
- This is done in collaboration with scientists and researchers who offer guidance and leadership, along with coordination of a project (National Geographic, 2021).

## **For this project:**

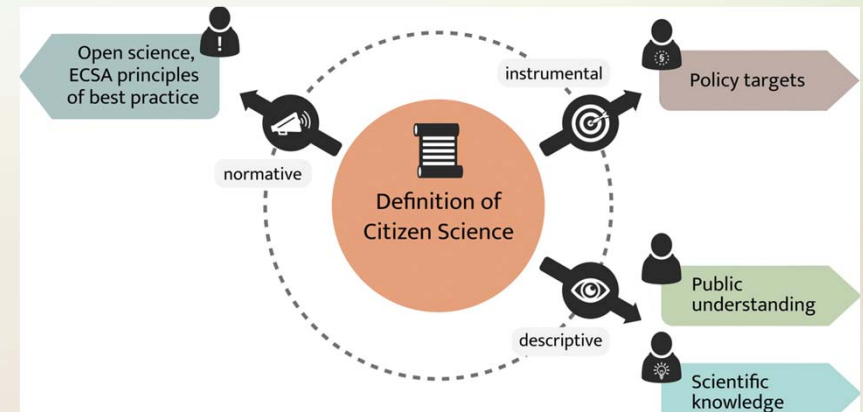
- Connecticut residents responded to a survey about climate change with their personal experiences, and perceptions on this topic.
- Our research team followed-up to obtain more in-depth information, photographs, when available, and planned in-person interviews.
- This is the foundation of the photojournalism piece of the project.



<https://thew2o.medium.com/citizen-science-and-the-ocean-4dff1b7e0d84>



Nationalgeographic.org



Haklay M., Dörler D., Heigl F., Manzoni M., Hecker S., Vohland K. (2021) What Is Citizen Science? The Challenges of Definition. In: Vohland K. et al. (eds) The Science of Citizen Science. Springer, Cham. [https://doi.org/10.1007/978-3-030-58278-4\\_2](https://doi.org/10.1007/978-3-030-58278-4_2)



# What Life is like in Connecticut Now

- Increasing temperatures
  - 2-3 degrees increase in the last century
- Rising sea levels and increasing flooding
- Erosion of wetlands, which are already under threat by human activities
- Modification of ecosystems
- Alterations in temperature and precipitation affect acute and chronic diseases
- Vector borne diseases are becoming more prevalent
- All in all, the balance of life in Connecticut is changing, and will continue to evolve...

(EPA, 2016)



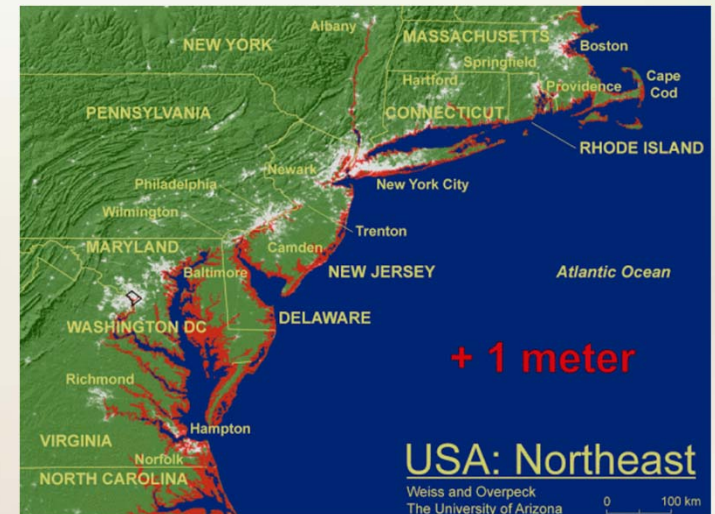
<https://health.clevelandclinic.org/living-with-lyme-disease-how-to-promote-long-term-healing/>



Guilford/Branford, CT



<https://www.livescience.com/heat-exhaustion.html>



<http://natureontheedgegenyc.blogspot.com/2012/11/sea-level-is-rising-60-faster-than.html>

# Project Goals

## **Short Term Goals:**

- Bring greater awareness to the changes already being seen and experienced in Connecticut.
- Build an inclusive constituency to increase the conversation around climate change.
- Engage with Connecticut residents to learn from each other, exchange ideas and brainstorm on ways to manage and possibly even mitigate climate change.

## **Long Term Goals:**

- Learn ways to live with and possibly benefit from changes that may already be permanent.
- Develop policies to protect residents from extreme heat, flooding, changes in food production, etc.
- Understand it's a natural cycle, however mankind's impact has accelerated increased changes.

# Opportunities Related to Climate Change

## Green energy

Electric cars/vessels

Wind Energy

Solar Energy

## Carbon Sequestration

Kelp farming

Algae research (Lamm, 2019)

Tree cover

## Investment

Education

Housing resilience

Financial firms investing in climate neutral/socially equitable projects

## Legislation

Improved/reduced packaging

Funding for environmental education

Climate sensitive zoning initiatives



<https://www.smithsonianmag.com/innovation/could-offshore-wind-farms-actually-sap-rain-from-hurricanes-180970448/>

# Final Notes

## W.A.I.T. – *We All Impact Tomorrow*

- Climate Change Awareness
- Teach Essentialism (McKeown, 2014)
- Enhance concept of Reduce, Reuse, Renew

***We choose to fight climate change, not because it is easy, but because it is hard. (Paraphrased from John F. Kennedy)***

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