

Testimony of James O'Donnell, Ph.D.

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To the Committee on the Environment ([envtestimony@cga.ct.gov](mailto:envtestimony@cga.ct.gov))

on H.B. 6441, AN ACT CONCERNING CLIMATE CHANGE ADAPTATION.

March 8<sup>th</sup>, 2021

Co-Chairs and Committee Members:

I am James O'Donnell, a resident of the Town of Groton, and a Professor of Marine Sciences at the University of Connecticut. I have also served as the Executive Director of the Connecticut Institute for Resilience and Climate Adaptation (CIRCA) since its founding in 2014. Through CIRCA, I have been involved in the development of many resilience and adaptation projects in towns across the State.

Some of the consequences of climate change are now apparent and others are emerging. It is clear that mean sea level and air temperature are rising. Consequently, the risks and costs of living and operating businesses along the shoreline will increase. Across the State, we should expect cooling expenses and heat-stress-related hospital visits to increase, and the cost of maintaining resilient power, water, and communications systems to rise. The Governor's Council on Climate Change has been working to catalog these impacts and develop policy options to minimize their consequences.

To minimize the impacts of climate change we must urgently curtail the rate of emissions of greenhouse gasses. We must also adapt to the unavoidable changes that we can foresee. My work at CIRCA has made it clear that the problems created by climate change, and practical options to address them, vary widely across the state and even within towns. It is also clear that municipalities are generally best-suited to prioritize issues and negotiate locally acceptable plans, and CIRCA is working to accelerate their effectiveness.

Climate change resilience and adaptation problems are often focused on a small part of a political jurisdiction, and sometime they span the borders of several. This has made consultation, consensus building, decision-making, scheduling, and revenue generation for implementation and maintenance extremely difficult. HB 6441 recognizes these obstacles and the authorities created opens up new ways to address them effectively. But in recognition of the diversity of geography and development patterns in Connecticut, and the traditions of local governance, they are not prescriptive. Towns have considerable flexibility on how to integrate climate change resilience and adaptation, and its funding, into their existing governance structures. The staff and faculty associated with CIRCA look forward to helping to develop and share effective implementation strategies.

Even with rapid reductions in the emissions of greenhouse gasses, warming and sea-level rise will continue for at least several decades. The consequences will undoubtedly become more severe and the losses more expensive. It is, therefore, appropriate that the investments needed to

reduce future risks and create new opportunities take a long view too. HB 6441 builds on the success of the Connecticut Green Bank to expand options for financing resilience and adaptation projects at low cost through the Environmental Infrastructure Fund. In combination with the options for revenue generation, a broad array of local resilience and adaptation priorities can be advanced. Further, the Green Bank will be authorized to support innovations in environmental infrastructure to broaden options and reduce costs.

Since the measures proposed here will accelerate the implementation of resilience and adaptation projects across the state, I entirely support *HB 6441*.