Speaking in support of Next Generation CONNECTICUT

Good afternoon, my name is John Silander. I am a professor of Ecology at the University of Connecticut and I have been at UConn for over 35 years. I was attracted to UConn initially and have remained here because of the quality of the institution, my colleagues and the students, as well as the quality of life here. The students coming out of our program are trained to think critically, and to solve problems by using the tools of science, technology, engineering and math. These are critical skills given the size of the problems we face in the state, and the ever-increasing rate at which new technologies are being developing. I would match the students at UConn against any that I have encountered elsewhere, and my former students are in business, industry and education positions in Connecticut and elsewhere. Connecticut has the human capital to produce a well-trained, highly competitive workforce; an investment in training more students will generate huge economic benefits to the state.

For example, the work my students and I do has brought in about 12 million in research dollars over the past 20 years, which has generated important returns to the State (an estimated $18M if one uses the common 1.5 fiscal multiplier) in the form of jobs and associated economic activity. Not only does my work bring money into the state directly, but my research contributes to preserving the economic value of landscapes. An important part of my research, the Invasive Plant Atlas of New England (IPANE), focuses on understanding where invasive species spread across the landscape and how to prevent their continued spread now and in the future. Invasive species cost the US about $150 billion per year directly, or for Connecticut alone (areally adjusted), about $225 million. This includes eradicating invasive species from agricultural lands (where they reduce agricultural productivity), as well as public lands and residential properties (where they reduce value), and in lakes, rivers and the Sound, where they reduce sport fisheries and the value of other aquatic activities. We also know that certain kinds of real estate development patterns actually promote the spread of invasive species while others do not. Moreover, we know that there are costly health effects associated with invasives; Lyme disease is most prevalent in areas with certain very common invasive plant species. The cost of treating Lyme Disease and associated loss in productivity is estimated at more than $200 million per year in the US or more than $26 million for Connecticut alone. Thus understanding where invasives spread and how to control them would have a huge economic benefit, as well as increasing the overall quality of life of Connecticut.

These are some of the tangible direct and indirect economic benefits of the research that I and my students have conducted at UConn. Additional scientists in my field at UConn and improved facilities can only amplify this further. But we are simply at capacity for effectively training more STEM students; I urge you to support Next Generation Connecticut, and thank you for the opportunity to speak to you today.

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