

**STATEMENT OF KATE MICHAUD**  
*Senate Budget Committee – March 1, 2023*

THANK YOU to Chairman Whitehouse, ranking member Grassley and the distinguished members of the Committee for allowing me to address you today.

My name is Kate Michaud and I am the Town Manager in the Town of Warren, Rhode Island, which is the smallest town in the smallest county in the smallest state in the nation. The Town of Warren is the location of the seat of the historic region of Sowams, where the Massasoit Ousamequin once welcomed a delegation of Pilgrims including Edward Winslow and Stephen Hopkins. Warren's prime location, featuring 18 miles of waterfront land, allowed for a thriving shipbuilding industry, commercial shell fishing and other marine based businesses. Over time manufacturing has taken over as the town's top employer, with a diverse array of companies including defense contractors, composite industry leaders and consumer goods producers.

Along with the rest of the state, housing density has increased to provide for the workforce that has followed job creation. In 2022, the Rhode Island was the second most densely populated state, with the majority of residents living near its 400 miles of coastline. Warren is no different. But Warren is changing. Warren's coastal proximity and flat elevation, averaging 7' or less in the most densely populated area of town, has rendered the town especially vulnerable to the effects of coastal flooding and climate change. What is happening, and what is predicted to happen, in our most vulnerable coastal areas is significant; and while Warrenites are tirelessly self-reliant it is beyond our ability to simply cope.

In 2017 the Town of Warren undertook a major wastewater treatment facility upgrade project to increase capacity and improve water quality. As the stewards of the taxpayers' funds, the town undertook a cost/benefit analysis of the equipment that was to be installed to ensure that it would be viable for the life of the asset. With assistance from our engineers, state agencies, the University of Rhode Island and utilizing NOAA data, a conservative estimate of 3' of sea level rise was adopted for the design horizon of 2065. Facility upgrades were completed in 2022 at a cost of \$21.7 million borne by the local taxpayers. Viability of the facility beyond 3' of sea level rise is unlikely.

As a result of the study completed for the wastewater improvements, the town determined that there was a pressing need to calculate the potential future impacts of coastal flooding on our other critical municipal infrastructure and on the town's taxbase. Efforts have focused on

our Market Street area, which is a 184-acre district containing approximately 700 housing units, mostly multi-family rental housing, as well as 30 businesses. The area currently has a total assessed value of \$138 million – or just over 10% of the total assessed value of the town. A “no action” scenario was developed, predicting what would happen with no efforts to mitigate the rising waters. The data analysis concluded that by the year 2100, 306 of the area’s 400 buildings could be lost permanently to the rising water with a loss in value of more than \$85 million in today’s dollars – or more than 60% of the total assessed value of the area. A 24” storm surge on top of the predicted sea level rise, not extreme for a coastal hurricane or nor’easter, could result in an additional \$52 million in flood damage and \$126 million in lost business revenue. For reference, the Hurricane of 1938 brought 10 to 12 feet of storm surge to Rhode Island.

With just 3 feet of sea level rise, predicted to be experienced locally within the next 30 years, 3 of the town’s major roads, including the primary evacuation route, would be flooded with salt water and impassible every day at high tide. These roads are already experiencing significant effects from “sunny day” flooding occurring during the seasonal high tides in the spring and fall. Stormwater systems intended to drain precipitation away from the populated areas are instead operating in reverse, bringing tidal water into the inland areas flooding roads, parking lots and even homes. Underground tidal action has washed out the road base of at least on local road, causing a partial collapse and hundreds of thousands of dollars in damage to the underground utilities. While we are just starting to fully understand the potential cost of damage to public assets, we know we will need additional resources beyond what we can make available and we are looking to federal resources to help us to assess and prepare, including FEMA’s Building Resilient Infrastructure and Communities program and the National Coastal Resilience Fund.

I have been invited here today not because Warren is unique in its vulnerability, but because it is a microcosm of the hundreds of small coastal communities in this country, all populated with hard working residents and business owners. Warren is not a playground for the rich. It is not a tourism hot spot. The homes that line our shores are not vacation homes of little consequence. I am here not because I am trying to take a cutting-edge approach to local governance, but because one of my most basic duties is to prepare my community for the realities of a future. I am concerned about financial limits of the taxpayers. I am concerned about the bonding agencies. And I am concerned about what happens when the financial industry decides that a 30-year mortgage in my town is too great a risk to take. I thank you for the opportunity to address you today and I look forward to answering any questions that you may have.