

From the First State to the Fiftieth State: Strategies for Adapting to Climate Change

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November 2019

The state of Delaware is particularly vulnerable to the effects of climate change. With 381 miles of ocean, estuarine, and riverine coastline, no spot in the state is more than eight miles from a tidal body of water. A 2013 study showed that up to 11% of the state's land mass could be inundated by rising seas by the end of the century, resulting in the flooding of tens of thousands of homes and businesses, permanent loss of globally important migratory bird habitat, erosion of ocean beaches that drive the state's robust tourism economy, and saltwater intrusion into drinking water supplies¹.

Delaware's small size, with respect to both geography and population, provides challenges and opportunities in responding to the threat of climate change. Delaware's municipal and county governments make land use decisions and administer codes, but often are not large enough to have paid professionals on staff.² The state government is largely responsible for the maintenance of roads, drainage infrastructure, and beaches. In addition, there are no local public health departments and the state's largest county lacks a parks department. Because of the interactions and interdependence of Delaware's state and local governments, the state's strategy for responding to climate change has focused on providing tools, resources, and technical assistance for these two primary audiences, as well as building partnerships between them.

The tools and data that Delaware provides to its state and local agencies (and others) is a key part of its success in engaging agencies at all levels in preparing for climate change. Statewide sea level rise scenarios and accompanying inundation maps at 1-foot increments allows even the smallest of municipalities access to important planning information at no

¹ www.de.gov/slrva

² Only six of Delaware's 57 municipalities have populations over 10,000

cost. The state, in partnership with its largest university, also provides temperature and precipitation projections through the end of century; allowing easy access to climate indicators like heating degree days and length of growing season.

Data and tools are only useful if they are understood and utilized. Trainings on the use of these datasets for making decisions are routinely offered and guidance documents are also available. Perhaps more importantly, Delaware has made a combination of funding and technical assistance available to municipal governments and state agencies through a variety of programs including the Resilient Communities Partnership Program, Sustainable Communities Planning Grants, and the state-agency focused Strategic Opportunity Fund for Adaptation.

Strong partnerships are essential to making progress in adapting to climate change; these partnerships can be cultivated in small states in a way that wouldn't be possible or even practicable in a state with a large geographic area. Although informal partnerships and relationships can be useful, state agencies and local governments are now experiencing rather high turnover rates; disrupting many of the informal coordination networks. In an effort to formalize the coordination network, the state convened the Resilient and Sustainable Communities League (RASCL). Now in its fifth year, the RASCL is a venue for practitioners to share new information, coordinate efforts, ensure against duplication of effort, and to plan outreach to end-users.

While much progress has been made in the state, considerable challenges remain. Nearly all of the municipalities in Delaware have conducted a climate or resiliency planning effort, yet few have passed ordinances limiting development in at-risk areas. There has been only one piece of legislation passed at the state level addressing sea level rise—focused solely on heavy industrial development in coastal areas. The population in many of the most at-risk areas is increasing due to an influx of retirees from surrounding states with high property taxes. An upcoming comprehensive climate adaptation and mitigation planning effort in 2020 will provide a new opportunity to assess progress and identify new strategies for addressing climate change.

