Climate-Smart Community Profile: Providence, RI



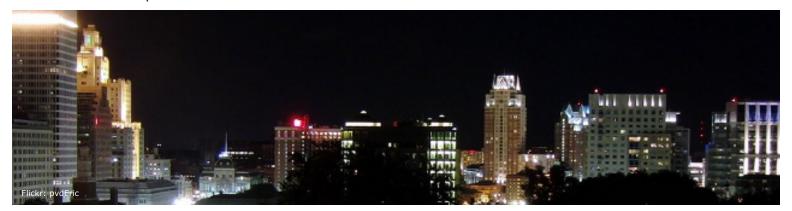


One of the oldest cities in the US, Providence is located in northern Rhode Island with a population of 178,000 residents, but is part of the greater Boston metro regional area, hosting 7.6 million. Service industries such as healthcare and higher education are the current drivers of Providence's economy, although its historical manufacturing industry also remains strong. The city is located at the northern head of Narragansett Bay, approximately 25 miles from the open ocean. Providence currently experiences warm summers, cold winters, and pervasive humidity.

Cities and towns across the United States preparing for and responding to the impacts of climate change, a process known as climate change adaptation. Providence is using a variety of nature-based approaches to protect people and property that also confer adaptation value for wildlife and habitat areas. Providence is particularly concerned with preparations for **sea level rise, extreme weather events, increased pollution, drought, and loss of biodiversity.**

Climate Planning Activities

- 2005: Mayor signed **US Conference of Mayor's Climate Protection Agreement** vowing to "meet or beat" the Kyoto Protocol.
- December 2007: City released Providence Tomorrow as an interim update to the city's comprehensive plan. The plan outlined specific strategies to make Providence "green and sustainable," including initiatives to restore wetlands, curb CO₂ emissions, redevelop brownfields, increase urban tree canopy, upgrade stormwater management guidelines, implement low-impact-development strategies such as green roofs and rain gardens.
- 2008: Mayor published Greenprint report outlining city's efforts to reduce global warming
 pollution and participate in the green economy. The report included plans to purchase energy from
 renewable resources, promote conservation, incresase recycling expand parks and public gardens,
 and more.
- 2012: Environmental Council of Rhode Island (ECRI) released a set of recommended climate change resilience strategies for under-served urban communities in the state. Climate-smart strategies include increasing permeable surfaces and expansion of green spaces. The recommendations were developed for adoption by the by the Rhode Island Climate Change Commission report due in March 2012.



Implementation of Adaptation Activities



Wetlands Preservation (Providence Tomorrow)

- Coastal wetlands are expected to be particularly threatened by rising sea-levels. These wetlands provide valuable habitat for diverse species and act as natural storm-water absorption centers that can protect both wildlife and humans.
- In order to allow for upland migration of wetlands as sealevels continue to rise, the City is promoting protection of their surrounding areas as buffer zones, a strategy known as managed retreat. Save the Bay is a local non-profit promoting eelgrass and scallop restoration and dam removal to help restore salt marshes.

Urban Forest Maintenance (Providence Tomorrow)

- High percentages of paved surfaces cause urban areas to absorb and retain more heat, increasing temperatures of the city and surrounding areas in what is known as the "urban heat island effect. These changes create problems for wildlife both wildlife and people living in cities.
- The new master plan expands existing tree canopy to provide shade and offset the urban heat island effect. The City plans to implement new policies and public outreach campaigns to reach 25% canopy cover by 2020. The increased canopy will also provide valuable wildlife habitat.





Stormwater Management (Providence Tomorrow)

- Climate change is increasing storm frequency and intensity, putting further pressure on stormwater management systems and the watersheds surrounding cities.
- 2010: Guided by Providence Tomorrow's call for action, the City released a **Stormwater Design Standards Manual** outlining requirements for increased management using green solutions such as rain gardens, green roofs, and retrofitting stormwater basements with natural materials.

What's helping Providence?

- Strong overall environmental planning from Greenprint Providence
- Excellent integration of adaptation and conservation goals in Providence Tomorrow
- Strong efforts from local NGOs like the Environmental Council of Rhode Island



For more information, please contact: