

Resilience Works, LLC

Climate-change consulting to give our future a future

Allen Kratz, Principal

1245 Bloomfield Street, Hoboken, New Jersey 07030 201-214-7476

December 16, 2019

New Jersey Department of Community Affairs
Via email to sandy.publiccomment@dca.nj.gov

Subject: Action Plan Amendment Number 35 Substantial Amendment –
Atlantic City Resilience Program; Special Purpose Revolving Loan Fund

Having tracked all seven post-Sandy Community Development Block Grant—Disaster Recovery projects in New Jersey, New York and Connecticut for the Rockefeller Foundation funded Rebuild by Design Project, I am familiar with both the challenges of climate adaption and the opportunities for funding cost-effective mitigation and adaption.

On that basis, I support the Atlantic City Resilience Program, pursuant to this Action Plan Amendment Number 35, through the transfer of Blue Acres funds and the establishment of a Special Purpose Revolving Loan Fund that will enable repair, replacement, or introduction of bulkheads, as well as flood mitigation efforts such as floodproofing Atlantic City's City Hall and other public buildings and inspecting and replacing check valves in drainage areas.

Atlantic City's Vulnerability

First Street Foundation, a 501(c)(3) nonprofit research and technology organization working to define America's flood risk, cites Army Corps of Engineers projection that "sea levels in the Atlantic City area will increase by 6.24 inches in the next 15 years. First Street notes that Atlantic City is at risk from the highest annual tidal flood and that the risk increases as sea levels rise. First Street cautions that the projections do not account for rain events that can exacerbate coastal storm surge or tidal flooding

Using the Army Corps' figure, First Street projects that flooding induced by the rising ocean, storm surge and rain events will create adverse effects on the value of impacted properties. Already, from 2005 through 2018, properties in Atlantic City have lost value in the amount of \$174,748,706, First Street estimates. Without action, existing

properties will lose a total of \$201,33,123 in value during the next 15 years, for a total loss of \$376,381,829, First Street estimates.

In numerical terms, the number of residential properties at risk will rise 20% during the next 15 years, from 3,839 residential properties to 4 616 residential properties, First Street estimates, and the number of schools and religious institutions at risk is likely to rise by 13% during the next 15 years.ⁱ

Property-value losses of that magnitude are likely to put additional pressure on Atlantic City's budget lines that are supported by assessment-based property tax revenue.

Flood-risk reduction measures of the Atlantic City Resilience Program will reduce economic and fiscal risks to Atlantic City, its property owners and those who are employed within the city. Correspondingly, the Atlantic City Resilience Program likely will attract new investment in residential and business properties, thereby generating additional tax revenue for further resilience infrastructure.

Value of Revolving Loan Financing

The time required for planning, permitting and implementing the Atlantic City Resilience Program and the federal expenditure deadline of September 30, 2022 creates a compelling rationale for the proposal by the Department of Community Affairs to direct all future program income into a Special Purpose Revolving Loan fund that it will create and that will be dedicated for several purposes, including funding for new mitigation and resilience efforts leading up to and following the federal expenditure deadline of September 2022. Income placed in the revolving loan fund will permit the State to maintain the necessary personnel through closeout, conclude administrative activities and support other eligible program activities, such as mitigation and planning.

History and Evolution

Revolving loan funds have become a reliable vehicle for financing energy-sector public infrastructure since the 1970s. With support from the U.S. Department of Energy, and funds from the American Recovery and Reinvestment Act of 2009, most states operate a revolving loan fund, using revenue from federal and state funds, revenue from greenhouse gas auctions, bond proceeds and private capital to provide low-cost loans whose loan repayments become available for subsequent lending – thereby creating a revolving dynamic.ⁱⁱ

Originally focused on energy projects, state revolving loan funds have become an increasingly important mechanism for providing low-interest loans to water-quality and water-efficiency projects in many states.ⁱⁱⁱ

Revolving Loan Financing for Resilience

The evolution of revolving loan funds to enhance water quality to managing excess water has been an easy step for some states. In Maine, for example, the Department of

Environmental Protection encourages participants in its Clean Water State Revolving Fund to develop a Climate Adaptation Plan for their wastewater treatment system. The incentive is a principal-forgiveness loan to borrowers who assess the system's vulnerabilities to climate change and include a plan for system resiliency.^{iv}

At the national level, the U.S. Environmental Protection agency encourages the use of clean water state revolving funds to address climate adaptation. It points to successful projects in Columbia, Indiana, and in Suffolk County, on Long Island in New York.

As to the Long Island project, the EPA notes that with "assistance from the New York Environmental Facilities Corporation (NYEFC), the Bergen Point Wastewater Treatment Plant in Suffolk County is effectively managing the repair and replacement of infrastructure assets, as well as fortifying infrastructure against another severe weather event like Superstorm Sandy. The project included the planning, design, and construction associated with the replacement of effluent outfalls. This \$75.4 million project is funded by a \$16.8 million Storm Mitigation Loan Program grant and a \$58.6 million interest free loan executed in 2015."^v

For the reasons stated above, it is my professional opinion that the Department of Community Affairs will do well to create a Special Purpose Revolving Loan Fund to advance the purposes of the Atlantic City Resiliency Program.

Sincerely,

Allen W. Kratz

Allen W. Kratz, Principal

201-214-7476 resilienceworks.info @allenwkratz

ⁱ Flood IQ.com, "Atlantic City," First Street Foundation, <https://floodiq.com/poi/5b7e0ea13e9667188ad084a84e3fddb7>, viewed December 16, 2019.

ⁱⁱ National Association of State Energy Officials, "State Energy Loan Funds," <http://naseo.org/Data/Sites/1/self-database-two-pager.pdf>, viewed December 16, 2019.

ⁱⁱⁱ American Council for an Energy-Efficient Economy, "Revolving Loan Funds," <https://aceee.org/sector/state-policy/toolkit/revolving-loan-funds>, viewed December 16, 2019.

^{iv} Maine Department of Environmental Protection, "Clean Water State Revolving Fund (CWSRF) Requirements and Guidance for a Climate Adaptation Plan (CAP)," https://www.maine.gov/dep/water/grants/SRF/cwsrf/CAP_Requirements_Final2018.pdf, viewed December 16, 2019.

^v United States Environmental Protection Agency, "Funding Resilient Infrastructure with the Clean Water State Revolving Fund," https://www.epa.gov/sites/production/files/2016-11/documents/funding_resilient_infrastructure_with_the_clean_water_state_revolving_fund.pdf, viewed December 16, 2019.