

NEW ECOLOGY

**Resilience Audits and Analysis,
Opportunity Assessment**

Villages of East River

Location: Anacostia, Washington, D.C. • **Units:** 202 • **Owner:** NHT Enterprise • **Constructed:** 1963 • **Building Rehab:** 2000

WHY RESILIENCE?



Climate change is increasing the frequency and severity of extreme storms, exacerbating flooding, shifting precipitation patterns, and causing more extreme heat waves throughout the United States and around the world. Climate change-related incidents disproportionately affect individuals least able to cope with extreme events. Residents of affordable multifamily housing stand to gain the most in terms of the tangible and intangible benefits of resilience planning. Owners and operators of affordable multifamily housing can realize long-term operating and avoided impact cost savings, increased durability, and improved emergency operations through resilience planning.

Project Background

The Villages of East River is a 202-unit development consisting of 15 buildings. The units are rented to low-income residents and families. The property was purchased using a loan from DHDHCD, with an additional pre-development loan from NHTCDF. New Ecology performed a resilience, energy and water, and solar plus storage opportunity assessment of the Villages of East River.

For the assessment, NEI conducted an onsite walkthrough of the development as well as a desktop analysis of hazard maps, community resources, and solar potential. Here, NEI identified critical risks; reviewed the building's historical impact from extreme wind and hurricanes, flooding, ice, snow, and extreme heat and cold events; identified energy and water efficiency and solar and storage potential; and recommended upgrade opportunities—which included cost estimates and recommendations on appropriate timing and funding sources for implementation. New Ecology also analyzed the development's historical utility consumption data to benchmark the property's current energy and water efficiency.

New Ecology found that the biggest hazards to the Villages of East River are related to stormwater flooding and extreme heat and made several upgrade recommendations based on these findings, as well as other upgrade recommendations relating to energy consumption in order to reduce water and energy consumption at the development.

RESILIENCE RECOMMENDATIONS

- Planning stormwater management at the site and building level
- Elevating HVAC equipment to avoid potential damage from stormwater, mold and mildew remediation
- Replacement of materials with mold-resistant materials
- Upgrading interior unit lighting to LED fixtures

Planning for the Future

The owner has committed to upgrading the buildings at the Villages of East River to meet Enterprise Green Communities standards. At this time, they are performing repairs based on immediate needs (some of which are based on New Ecology's recommendations about critical equipment, such as electrical panels). They are planning a major rehab within the next year, which will incorporate many recommendations from New Ecology's resilience assessment. This includes a new roof (potentially a solar/green roof), insulation upgrades, new high-efficiency HVAC and hot water heaters, energy star appliances and new flooring and fixtures in the units, basement waterproofing, erosion management measures, as well as the creation of two new community centers.