



RESILIENT WILMINGTON: 3 YEARS OF PROGRESS AND THE PRIORITIES AHEAD

This memo provides a high-level summary of the Resilient Wilmington Plan, released in 2022, and the progress made since its launch. The Resilient Wilmington Interdepartmental Working Group brought together staff from different departments in 2023 to collaborate on implementing the goals of the Plan.



Normal conditions along South Park Drive by the Brandywine River Raceway.

PROGRESS TO DATE

The City advanced resiliency with new projects, programs, policies, funding, and approaches to everyday practices. Some example successes include, but are not limited to:

- **Capital Improvement Projects:** Tina Betz Urban Arts Exchange Amphitheater, South Wilmington Wetlands Park and Sewer Separation, Park Improvements (e.g. Cool Springs Park, Barbara Hicks Park, and Rodney Square Park), Native Tree Planting Initiative
- **Resilience-Related Studies:** South Wilmington Shoreline Protection and Interior Drainage Study, Lower Brandywine River Flooding Study and Mitigation Strategy
- **Energy Efficiency:** Reduce Greenhouse Gases, Wastewater Treatment Plant (WWTP) Cogeneration Facility, Improvements at the WWTP, Energy Efficient Streetlights, Electric Vehicle Charging Infrastructure Policy Scoping
- **Funding Capture:** Grants from the Federal Emergency Management Agency (FEMA), U.S. Department of Transportation (USDOT), Delaware Natural Resources and Environmental Control (DNREC), National Fish and Wildlife Foundation (NFWF), National Oceanic and Atmospheric Administration (NOAA), and the Infrastructure Investment and Jobs Act of 2021
- **Community Outreach and Capacity Building:** Earth and Arbor Day, Community Emergency Response Training (CERT), Outdoor Living Classrooms



Remnants from Hurricane Ida

REFLECTING ON OUR GOALS

The Working Group selected 7 priority goals (from the original 19 goals) to guide the work of Resilient Wilmington between 2023 and 2024. Interdepartmental coordination has been key in advancing these goals. Additional resources, including capacity and funding, are still needed to expand the impact of this work and to continue progressing these goals. The table below summarizes progress toward these goals as of Winter 2024.

Green = Significant Progress
 Yellow = Some Progress
 Red = Little Progress

Expand Green Infrastructure for Storage and Conveyance	Projects such as the Tina Betz Urban Arts Exchange Amphitheater and various park improvements have advanced this goal, generating more stormwater storage across the city.
Further Education, Outreach, and Partnerships to Enhance Community Resilience	Earth and Arbor Day, the CERT program in the Southbridge neighborhood, and the Green Jobs Internship have engaged community members of all ages in environmental stewardship and emergency preparedness programs.
Raise Shorelines in Low-Lying Areas to Prevent Flooding	The Lower Brandywine River Flooding Study and Mitigation Strategy is an ongoing FEMA BRIC-funded study to understand and create a plan and concept design for reducing flooding in Northeast Wilmington. The South Wilmington Shoreline Protection and Interior Drainage Study, also funded by FEMA, was completed in 2023 and recommends a multi-pronged approach to reduce flood risk in South Wilmington.
Enhance Resiliency of Food Systems	Rodney Reservoir will host a community garden to promote local food production.
Reduce the City's Carbon Footprint by Investing In, and Advocating for, Cleaner Transportation Options	The City achieved a 42% reduction in GHG. Programs like LED streetlights, hybrid electric and all electric fleet replacements, cogeneration of biogas at the wastewater treatment plant, solar arrays at the water treatment plant and the Turner Public Works Building, and improvements in bike infrastructure have contributed to the GHG reductions.
Improve Resiliency of Neighborhoods	This goal benefits from a broad range of projects, including park improvements, combined storm sewer separations, CERT training and more. Continued improvements are being made through community capacity building in the 11th Street Bridge Long Term Recovery Community, and explorations in the Lower Brandywine Flood Study.
Incorporate Resiliency and Sustainability into the City's Codes and Planning and Development Review	Working Group members have been challenged by the need for a sweeping review of the city code. The need persists to be able to codify requirements that advance resiliency goals through city code.

CHARTING OUR PATH FORWARD

At this critical juncture, there are many opportunities to strategically strengthen the Resilient Wilmington work and embed it throughout the city's planning, programs, projects, and operations. Below are some key near- and mid-term opportunities identified by the Working Group.

NEAR-TERM OPPORTUNITIES (1-3 YEARS):

EDUCATION AND OUTREACH:

Educating the public about resiliency work in Wilmington is essential for fostering stewardship among youth, raising awareness of risks, and improving preparedness for disaster events. Expanding current education and outreach practices offer easy wins for resilience.

- **Increase the Number of Outdoor Living Classrooms** – Build on the success of the living classroom in Cool Springs Park by developing living classrooms in other city parks in partnership with local schools.
- **Expand CERT Training to More Communities** – Improve preparedness of communities by offering CERT training in communities beyond the Northeast Wilmington community.
- **Foster Greater Attendance at Earth and Arbor Day** – Expand the impact of Earth and Arbor Day by drawing greater attendance from more schools.
- **Capital Day** – Send a delegation of City staff to Dover to advocate for various resilience needs.



MID-TERM OPPORTUNITIES (3-5 YEARS):

GHG REDUCTION:

Reducing the city's impact on Green House Gas (GHG) emissions is a key recommendation of Resilient Wilmington. Opportunities exist for policy changes and planning to reduce reliance on fossil fuels.

- **Electric Vehicle (EV) Charging Infrastructure Master Planning**

Expand policy discussions for increasing uptake of EV charging infrastructure on public and private land. Apply for funding to support EV charging infrastructure implementation on public land.

- **Bike and Pedestrian Master Planning**

Align with Delaware Department of Transportation (DelDOT) bike infrastructure planning to design a connected system of bike and pedestrian infrastructure throughout the city.

RESILIENCY IN CITY'S CODE:

Wilmington's code shapes how the city is designed and built. Aligning the city's zoning code and development review process with resilience, energy efficiency, and walkability, will help create a thriving and resilient city.

FLOOD AND HEAT RESILIENCY IMPROVEMENTS:

Wilmington is prone to flooding and extreme heat. To improve the city's resilience to flood hazards, the City can continue to advance work to absorb, store, separate, and divert flood waters. Efforts to combat extreme heat and flooding combine understanding where strategies are most needed and implementing solutions.

- **Urban Forestry Plan**

Planting trees has both flood risk and heat reduction capabilities. Building on University of Delaware's Heat Island Study, strategically planting trees in hot spots can help reduce stormwater runoff and extreme temperatures.

- **Combined Storm Sewer Separation**

Continuing to separate stormwater pipes from sewer pipes will help reduce the instances of combined sewer overflows during heavy rainfall events.

- **Flood Resilience Studies**

Continue preliminary planning and design underway for the Lower Brandywine and South Wilmington to bring projects and programs into construction.

- **Resiliency Park Improvements**

Collaborations between the Parks and Recreation and Public Works departments to identify opportunities for increasing water storage in parks will help alleviate neighborhood flooding.

IN CONCLUSION:

Since 2022, Resilient Wilmington has made significant strides in advancing its priority goals and fostering a more sustainable and resilient city. Through interdepartmental collaboration and community engagement, projects like park improvements, CERT training, and green infrastructure initiatives have demonstrated the potential for meaningful progress. However, the continued success of these efforts relies on securing additional resources, including increased staff capacity and funding, to expand the impact of this work. By investing in these critical areas, the city can capitalize on near- and mid-term opportunities, such as enhancing education and outreach programs, improving disaster preparedness, and incorporating resiliency into city codes and planning. These investments will ensure Wilmington remains prepared to meet current and future challenges while building a resilient foundation for generations to come.



Tina Betz Urban Arts Exchange Amphitheater