

RECOMMENDATIONS

COMMUNITY RESILIENCE TOOLKIT FOR LOCAL PROJECTS



GREEN STORMWATER INFRASTRUCTURE

Identify further opportunities for green stormwater infrastructure GSI programs and areas for implementation.

There is little existing green stormwater infrastructure in Marcus Hook or Trainer and no additional municipal programs or incentives. Marcus Hook’s 2023 Park Plan calls for a rain garden/retention pond at Williamson Field, but does not otherwise address green infrastructure or stormwater needs more broadly. In both municipalities, additional facilities should be located on publicly owned open space or rights-of-ways in upland locations, outside of flood and storm surge inundation areas and contaminated soils, and where infiltration, retention, and detention practices will be most effective.

» See: *Marcus Hook Borough Mini Parks, Recreation and Open Space (PROS) Plan (2023)*



COOLING CENTERS

Evaluate opportunities to retrofit an existing community facility into a cooling/resilience hub.

There are no facilities currently designated as cooling centers or resilience centers. An existing community space should be designated as an indoor cooling center that can serve both municipalities. If located and floodproofed properly, this new cooling center could be a broader community resiliency center, acting as the staging ground and home base for disaster recovery efforts. Existing facilities that are less flood vulnerable and that could be upgraded include Marcus Hook Borough Administration Office, the Marcus Hook Elementary School, and the new Borough of Trainer Municipal Complex.



WATERFRONT ACCESS & AMENITIES

Integrate flood mitigation measures at existing waterfront parks and prioritize safe access to the waterfront.

The Delaware River is currently accessible at Marcus Hook’s Market Square Memorial Park where an adjacent closed public pier is currently being redesigned and planned to reopen. The pier project and future planning for the park must account for sea level rise and future storms to ensure continued access. Trainer does not currently have any waterfront access; however, access to an undeveloped site on the Trainer/Chester border is mentioned in various past plans. A study should be implemented to assess feasibility of possible future public access at this site.

» See: *Marcus Hook Borough Mini Parks, Recreation and Open Space (PROS) Plan (2023)*, *Delaware County 2035 Open Space, Recreation, and Greenway Plan (2015)*, *Renaissance Program: Planning Area 1 Action Plan (2003)*



TREE PLANTING

Expand the community tree planting program.

Although a participant in the Tree City USA program, Marcus Hook has the lowest percentage tree canopy of any municipality in Delaware County. While Trainer has more areas of existing tree canopy in its upland parks and open spaces, similar to Marcus Hook, developed areas have few street trees. Parks and open spaces in both communities have benefited from past volunteer and conservation tree planting efforts. Additional tree planting should be prioritized on publicly owned community facilities and open spaces upland of areas that frequently flood and where the shade and air quality benefits can be most beneficial.



SHADE-WAY CORRIDORS

Prioritize key corridors for more shade trees.

The proposed Marcus Hook Creek Greenway would create a vital shade and connectivity corridor, benefiting both municipalities and creating linkages inland to other parks and open spaces. An additional north/south shade-way along Market Street and Green Street will create shaded pedestrian connections from Market Square Memorial Park inland to residential areas and other community assets, while an east-west linkage along Post Road or Penn Avenue will create connections to the proposed Marcus Hook Creek Greenway. In Trainer, connections to the Marcus Hook Greenway can occur along Post Road with additional north/south linkages at Main Street and Price Street. In the long-term, a buffer along Trainer’s Stoney Creek could allow for an additional shade-way corridor connecting inland areas to the waterfront.



SPRAY FOUNTAINS & SPLASH PADS

Integrate water features into existing community recreation areas.

While none currently exist in Marcus Hook or Trainer, a facility could be added at an existing or new upland park space. In Marcus Hook, Mickey Vernon, Centennial Park, or Williamson Field might be appropriate. In Trainer, Henry Johnson Park, Borough of Trainer Municipal Complex, the Wilcox Street (3rd Street) Park/Playground are potential locations.



BUILDING RETROFITS

Implement a building retrofit program targeted at flood risks.

No building or infrastructure retrofit program currently exists. In Marcus Hook, vulnerable public assets that should be retrofitted to minimize sea level rise and storm impacts include the low-lying Market Square Memorial Park and adjacent pier as well as the recently reopened Curt Weldon Community Center. Further inland, the recently constructed Marcus Hook Fire Department building may be vulnerable to flooding from Marcus Hook Creek. Specific facilities and equipment may need to be raised or otherwise protected from flooding at the Marcus Hook Terminal and in Trainer at the Monroe Refinery.



DEPLOYABLE/TEMPORARY BARRIERS

Evaluate feasibility of deployable or temporary barriers in locations susceptible to flooding.

There are no current known plans for deployable or temporary barrier systems in Marcus Hook or Trainer. These systems are appropriate at critical infrastructure and community facilities and/or in narrow pathways of localized flooding.



ENVIRONMENTAL MONITORING & MODELING

Work with neighboring boroughs and industries to create a comprehensive database with real-time environmental information.

Municipal departments across Marcus Hook and Trainer, as well as in coordination with industrial facilities, should work to create a comprehensive database that collects information on various environmental factors like weather, flood risks, and pollution levels. The database can be used to facilitate appropriate responses and management in the event of a disaster.



PAVEMENT REDUCTION

Study potential underutilized paved spaces for depaving and Green Stormwater Infrastructure installations.

There are no known municipal-led projects or policies for reducing pavement (impervious surfaces) in Marcus Hook or Trainer. Underutilized paved and compacted areas on larger industrial sites should be studied for their potential to be planted and/or used for green infrastructure to hold or infiltrate water during flood events.