

RECOMMENDATIONS

REGIONAL ACTIONS



RAISING EDGES/Shorelines: Levees & Flood Barriers

Evaluate existing berms at industrial facilities against modeled flood risk. Study feasibility of a neighborhood-specific levee to protect against future flooding.

No levees, berms, or other raised shorelines exist or are planned for Marcus Hook. In Trainer, the National Levee Database notes the Delaware River Tank Farm Dike surrounding a portion of the Monroe Refinery's tank farm adjacent to the river. A continuous levee/berm along the Delaware River might be possible from just south of Marcus Hook at Naamans Creek then continuing up the shoreline to Marcus Hook Creek and the Trainer border. North of the creek, the existing tank farm levee should be studied for reinforcement to account for sea level rise and more severe storms.

A more local levee/berm/sea wall should be studied at Market Square Memorial Park that would extend inland as needed to protect the Marcus Hook community from flood events. Furthermore, site/facility-specific levees may be needed at the Trainer Waterfront site to help reduce flood risk at the adjacent DELCORA stormwater treatment plant and inland along Marcus Hook Creek on the Trainer-side just north of Post Road. Additional site or facility-specific levees for runoff containment and flood protection should be considered for flood vulnerable areas containing hazardous material or chemicals.



RAISING INFRASTRUCTURE

Prioritize shoring up public areas and public access points.

Sea level rise alone may begin to impact Market Square Memorial Park, the adjoining fishing pier, and the more southern portions of Market Street. To the extent possible, these sites should have key utilities, equipment, access, and service drives as well as entries/exits and paths of egress raised to minimize the impacts of more frequent flooding and inundation.



CENTRALIZATION OF CLIMATE RISK INFORMATION

Establish a public, centralized platform to integrate information across municipalities and industry.

Marcus Hook and Trainer should have a designated clearinghouse that collects all climate-related information and tracking, including emergency management and evacuation responses, from all municipality agencies. Information from industrial facilities should also be integrated, as they have more up-to-date information on pollution levels, accidents, and any other relevant information. This allows municipalities to monitor flood risks and ensures a coordinated response in the face of an emergency. Residents will be able to access accurate, real-time information before, during, and after any incident.



NATURE-BASED SOLUTIONS

Evaluate possibility for living shorelines and wetlands at key waterfront locations.

No nature-based solutions (NBS) exist or are currently proposed in either Marcus Hook or Trainer. Generally, given the long history of industrial development right up against the Delaware River, little space remains in either community to develop larger NBS. Wetlands and living shorelines should be studied further at Market Square Memorial Park, the wetland impoundments ponds between the Monroe Refinery and the Delaware River, and the waterfront site in Trainer.

» See: *A Natural Heritage Inventory for Delaware County Pennsylvania (2011)*



IMPROVED CONNECTIVITY

Expand the creek system into a multi-use trail system connecting Marcus Hook and Trainer.

Though adjacent, the small communities of Marcus Hook and Trainer are separated by the Marcus Hook Creek and the large industrial land uses that dominate the first half mile inland of the Delaware River Waterfront. Developing the creek into a bike and pedestrian greenway will interconnect the communities and create new shared community spaces integrated with flood reduction measures. Extending the trail inland along the proposed PECO right-of-way trail would also connect Marcus Hook and Trainer to more inland communities in Delaware County. Bike and pedestrian enhancements should continue along the route of the East Coast Greenway along West 10th Street/Post Road (US Highway 13), Market Street in Marcus Hook, and Price Street in Trainer.