PROJECT PARTNERS











What is MS4

- Municipalities must obtain permit coverage from the PA Department of Environmental Protection (DEP) to discharge stormwater from Municipal Separate Storm Sewer Systems (MS4s) into rivers and streams.
- As part of the MS4 permitting program, municipalities have to submit a Pollution Reduction Plan (PRPs) which require reductions in the total amount of sediment, nitrogen, and phosphorus pollutants discharging into the waterways.
- The DEP's regional offices inspect MS4 municipalities to determine if the MS4 is meeting its permit obligations.
- The City of Pittsburgh (Pittsburgh Water), the Pennsylvania Dept of Transportation, and the PA Turnpike Commission all have PRPs with MS4 pollution loading reduction requirements



- Goal of the project is to reduce annual sediment loading and flooding in the Sawmill Run Watershed
- The contract required the project to occur in the Sawmill Run Watershed within the Pittsburgh City Limits
- The watershed is 86% urbanized, site selection for the project was limited
- The work had to adhere to one of the eligible protocols covered in the Chesapeake Bay *Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects*
- Selected sites included a UNT to Sawmill Run located along the Moore Park Greenway and a UNT to Sawmill Run located in the Beechview Greenway along Crane Ave
- Estimated Sediment Reductions: 357,739 lb/yr of reduction for PennDOT; 488,528 lb/yr for Pittsburg Water @ 50% efficiency
- Total Project Cost \$1,730,000 cost sharing:

PennDOT Share \$500,000; PA Turnpike Share \$230,000; Pittsburgh Water Share \$1,000,000



MOORE PARK PROJECT



- The property is owned by the City of Pittsburgh and the Pittsburgh Public Schools
- The stream is 1,981 LF in length originating at the Moore Park Soccer Fields flowing east towards the PRT Busway
- LRG is proposing stream and floodplain restoration and the construction of 2 bioretention/raingarden facilities at the headwater to reduce the sediment load of the stream and increase the stormwater retention





Restoration methods/BMPs :

- Dynamic Stream Valley Restoration
- Regenerative Stream Conveyance
- Stream Channel Stabilization
- Rain Garden Construction
- Landscape Restoration



BEECHVIEW GREENWAY CRANE AVE PROJECT



- The property is owned by the City of Pittsburgh
- The stream is 1,722 LF in length originating at the Brashear Highschool Drive flowing east along Crane Ave.
- LRG is proposing stream and floodplain restoration and the construction of a bioretention/raingarden facilities to reduce the sediment load of the stream and increase the stormwater retention



BEECHVIEW GREENWAY CRANE AVE PROJECT





Restoration methods/BMPs :

- Regenerative Stream
 Conveyance
- Stream Channel Stabilization
- Rain Garden Construction
- Landscape Restoration

LANDSCAPING

- A Tree survey was conducted by an arborist to determine species, diameter at breast height, and the location of all tree inside the project limits were recorded using GPS.
- Tree loss was reduced to only what was necessary to complete the project.
- Tree replacement was calculated using expert judgement and mitigation will be conducted in accordance with the City of Pittsburgh requirements.
- The number of plantings for each tree removed was determined based on diameter of the lost tree.
- Moore Park number of trees/shrubs being planted 2181
- Beechview Greenway number trees/shrubs being planted 1438
- Typical species include: Sycamore, Red and Silver Maples, White and Pin Oaks, Dogwood, Larch, PawPaw, Hickory, Black Cherry, White Pine, Chokeberry, Viburnum, Serviceberry, Spicebush



• Similar Projects: Freedom Road Floodplain Restoration







Similar Projects: Shrader Hollow Floodplain Restoration



