

## Derry Borough Municipal Water Authority Stormwater Retrofit

**Design Features:** Permeable paving, retaining wall, native tree and shrub planting, and 40 foot asphalt wedge curb

**Date of Installation:** 2022

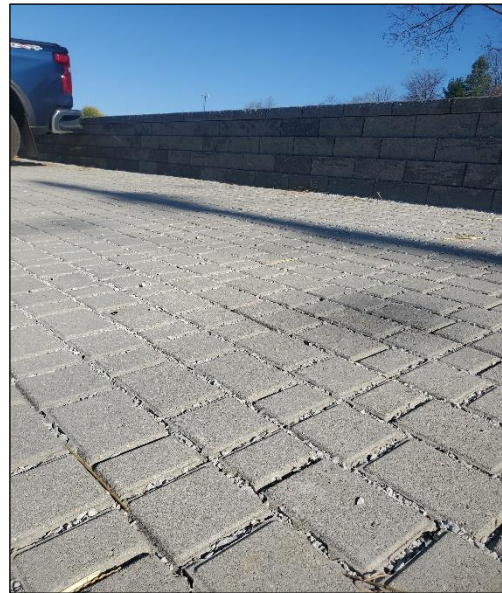
**Location:** Derry Borough, Westmoreland County PA

**Client:** Derry Borough Municipal Water Authority

**Cost:** \$88,660 Growing Greener, \$7,000 Derry Borough Municipal Water Authority cash match, \$7,417.42 WCD In-Kind Match

**Project Partners:** Westmoreland Conservation District, Derry Borough Municipal Water Authority

**Project Contact:** Hank Bradish, hank@wcdpa.com



*Close-up of permeable paving in Derry Borough Municipal Water Authority parking lot*

### Project Specifications

The purpose of this project was to reduce flooding and sedimentation to McGee Run and support the MS4 Community of the Derry Borough in their efforts to implement stormwater controls. The project constructed approximately 900 square feet of permeable parking and planted native tree and shrubs. The focus was primarily on retaining and promoting stormwater infiltration on the municipal authority's parking lot. The installation of permeable parking successfully helped reduce flooding, prevent sedimentation, and improved water quality.

### Benefits/Performance Measures

Through the installation of permeable parking, sedimentation loads were captured, shown below in the pollutant load reductions chart. The project built on the success of past collaborative efforts with the McGee Run watershed and aided in reducing pollutants and volume of runoff and improved water quality.

#### Pollutant Load Reductions

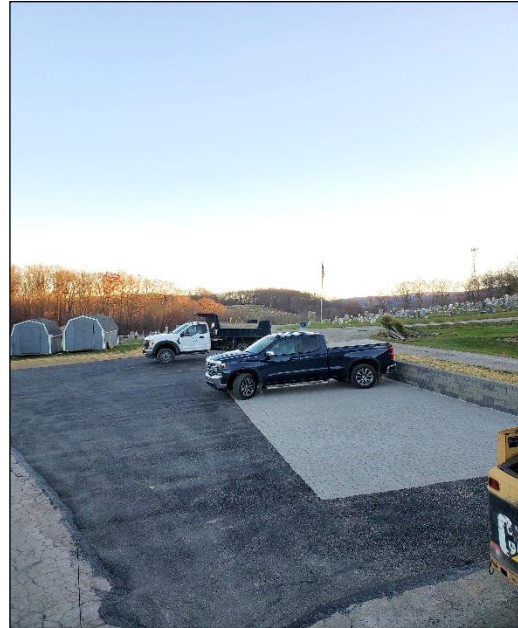
BMP	Location	Acreage managed	TSS/yr	TP/yr	NO3/yr
Permeable Parking	Derry Water Authority	0.3 acres	3.7 lbs	0.02 lbs	0.02 lbs

TSS-total suspended solids TP-total phosphorus NO3-nitrate

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*(Before) Derry Borough Municipal Water Authority Parking lot*



*(After) Derry Borough Municipal Water Authority Parking lot with retaining wall*



*New tree planted*



*New shrubs planted*