

TROUT RUN WELCANA DRIVE BMP

PA DEP Growing Greener: Project Number 201807131394 - Contract # C990000784

Project Sponsor: FAIRVIEW TOWNSHIP, ERIE COUNTY, PENNSYLVANIA

PROJECT DESCRIPTION

The Trout Run Welcana Drive BMP project was proposed to reduce pollutants, peak flow, and volume to Trout Run, an impaired stream and important nursery water and tributary to Lake Erie.

PROJECT GOALS

The project goal was to construct an infiltration basin to address sediment and pollutants from previously untreated developments within the Trout Run watershed. This project partially fulfills sediment (TSS) removal requirements of the Township's MS4 Pollutant Reduction Plan.

PROJECT RESULTS

The proposed infiltration basin will collect runoff re-routed from existing storm sewers from approximately 31 acres. Pollutant loads were calculated using PA DEP values for land uses and pollutant removals are based on BMP Effectiveness Values for infiltration practices, which have effectiveness values for sediment removal and nutrients (TP) of 95% and 85%, respectively.

BEFORE				AFTER			
TSS LOAD *	TP LOAD *	2-YR VOLUME	2-YR PEAK FLOW	TSS LOAD*	TP LOAD*	2-YR VOLUME	2-YR PEAK FLOW
22,900 lb/yr	37 lb/yr	77,067 ft ³	10.95 cfs	100 lb/yr	6 lb/yr	0 ft ³ **	0 cfs

* TSS and TP loads “before” and “after” are based on PA DEP loading rates and effectiveness values.

** Infiltration basin retains and infiltrates all runoff volume up to 2-year storm.

PROJECT PHOTOS



Photo 1 - BEFORE



Photo 2 - AFTER

PROJECT COSTS: Construction cost \$239,435.70. Growing Greener Grant award \$50,000.

LESSONS LEARNED: Abandoned/inactive or unidentified utilities can cause construction delays.

PARTNERS: Erie County Department of Planning and Community Development (Municipal Stormwater Assistance Program)

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