

City of Rockville Stream and Stormwater Projects

Rockville's Stormwater Management Capital Improvement Program provides funding to study, design and construct stormwater management facilities, stream restoration projects and stormwater conveyance projects. They are designed to restore, protect and maintain the physical, chemical and biological integrity of City streams, as well as protect private property and eliminate downstream impacts. The following summarizes three projects completed in the last three years.

1. Upper Watts Branch Stream Restoration Project

The Upper Watts Branch Stream Restoration Project finished in 2019, repaired severe erosion threatening private property and public infrastructure in the Watts Branch watershed. Additionally, the project reforested 2.5 acres of riparian buffer greatly impacted by beaver activity. The restoration repaired significant erosion of three outfalls as well as 1,100 linear feet of stream that was impairing water quality in the Watts Branch watershed and planted over 250 trees of ten different species. Throughout the project, staff worked closely with the community and the Department of Recreation and Parks in the design and construction phase to reduce the impact on the forest, wetland and recreation areas. Restoration activities include:

- Restabilizing the stream and reconnect it with the floodplain.
- Rehabilitating storm drain outfalls.
- Wetland creation and native plantings to restore the stream's native habitat.

	<i>Project Summary</i>
Lat/Long	39.098728, -77.170524
Grant Award	\$ \$1,300,000
City Match	\$ 633,518.57
Total Construction Cost	\$ 1,933,518.57
Nitrogen Reduction	408 lb/yr
Phosphorus Reduction	110 lb/yr
TSS Reduction	104 tn/yr

Before



After



2. Watkins Pond Stormwater Management Facility Retrofit

Watkins Pond stormwater management facility is a three-cell pond designed to treat 295 acres of developed area. The retrofit deepened two of the three ponds which in turn increased water quality treatment capacity.

- Treat an additional .29 inches of rain runoff
- Perform 50 linear feet of stream restoration
- Replant a dense wetland buffer area to provide habitat.

	<i>Project Summary</i>
Lat/Long	39.107494, -77.168634
Grant Award	\$750,000
City Match	\$484,024
Total Project Construction Cost	\$1,234,024
Nitrogen Reduction	770 lb/yr
Phosphorus Reduction	60 lb/yr
TSS Reduction	100 tn/yr

Before



After



3. Hungerford Stoneridge Stormwater Management Facility Retrofit

The Hungerford-Stoneridge SWM Facility was originally designed and constructed in the late 1990's to collect and slow stormwater runoff and reduce water pollution from a highly urbanized 450-acre drainage area, 185.89 acres draining to this pond are impervious. The retrofit increased the volume of the wet pool storage by 3.48 acre-feet which, with a smaller increase in extended detention volume, treats an additional 0.23 inches of rainfall runoff. The project also created upland and lowland marsh habitat with a total of 1,600 linear feet of wetland shoreline.

	<i>Project Summary</i>
Lat/Long	39.068057, -77.150742742
Grant Award	\$ 450,000
City Match	\$ 366,000
Total Construction Cost	\$ 839,000
Nitrogen Reduction	1379 lb/yr
Phosphorus Reduction	168 lb/yr
TSS Reduction	121 tn/yr

Before



After

