

Past Projects

Bandys Farm (Catawba, Catawba Co., NC): Stream and Wetland Mitigation

- Project Length: 8,025 LF
- Project Timeline: December 2023 – April 2024
- Project Summary: Performed clearing and grubbing; performed all aspects of excavation and grading for stream banks, stream channel and flood plain; installed stream diversion operations with pump-around operation, grade control woody riffle, constructed riffle (wetland outlet), log vane, log step, log roller, toe-wood, drop inlet structure; installation of temporary silt fence, tree protection fence, and temporary stream crossings. Constructed permanent ford stream crossings, installed single barrel and double barrel culvert crossings; Provided vegetation transplants, live staking, and temporary/permanent seeding.
- Client Contact: Ecosystem Planting and Restoration – Scott King (828) 348-8580



Millbrook Exchange Park Stream Repairs (Raleigh, Wake Co., NC): Stream and Wetland Mitigation

- Project Length: 724 LF
- Project Timeline: February 2024 – April 2024
- Project Summary: Performed all aspects of clearing, grubbing, selective tree removal; Repairs included raising the elevation of the streambed, armoring the structures with stone, and constructing a floodplain bench to alleviate in channel stresses, followed by planting with native tree and shrub species.
- Client Contact: City of Raleigh – Megan Walsh (919) 996-4009



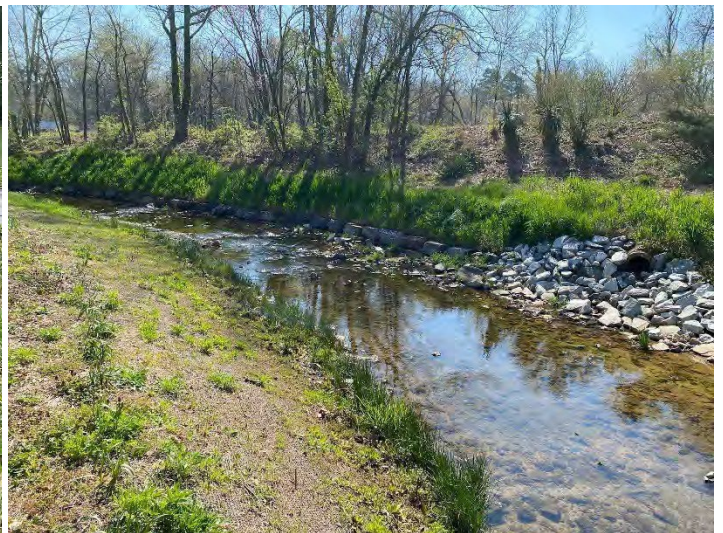
Schenks Branch Tributary (Charlottesville, Albemarle Co., VA): Stream Restoration

- Project Length: 818 LF
- Project Timeline: November 2023 – April 2024
- Project Summary: This project consists of construction of a Priority II and III stream restoration to stabilize 818 linear feet of tributaries to Schenks Branch (769 linear feet of Schenks Branch Tributary and 49 linear feet of an unnamed tributary at its confluence with Schenks Branch Tributary). The project is located in McIntire Park, in the future location of the Botanical Garden of the Piedmont. The design for Schenks Branch Tributary includes grading of the stream bed and banks and installation of features such as riffles, pools, cross vanes, j-hook vanes, toe wood, soil lifts, and a rock cascade. The project includes a planting plan that will meet ecological and stream requirements while fitting into the overall fabric of the Botanical Garden site. The planting plan includes native seed mixes, plugs, live stakes, shrubs, and trees. The goals of this stream restoration are to reduce pollution, increase ecological function, and improve overall condition of the stream, all while integrating with the planned Botanical Garden of the Piedmont.
- Client Contact: City of Charlottesville – Dan Frisbee (434) 970-3997



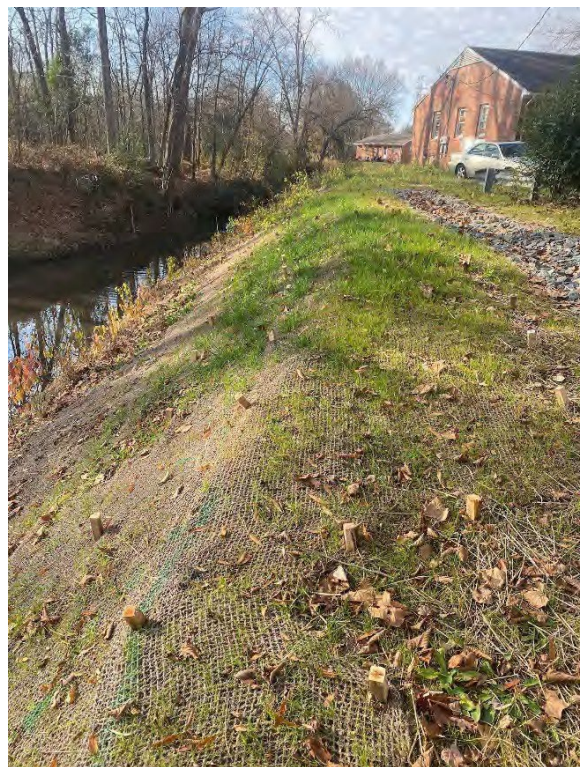
Greensboro Arboretum (Greensboro, Guilford Co., NC): Stream Restoration

- Project Length: 2,200 LF
- Project Timeline: June 2022- September 2022
- Project Summary: Performed all aspects of excavation and grading to repair and stabilize stream banks and stream channel; Installed stream diversion operations with pump around; Installation of outlet riprap and bank riprap stabilization, boulder toe and rock toe protection, log vane, constructed riffle, rock and roll riffle, rock cross vane, silt curtain; Provided erosion and sediment control measures; provided vegetation reestablishment, vegetative transplants, live stakes, tubelings, herbaceous plugs, and temporary/permanent seeding and mulching.
- Client Contact: City of Greensboro, North Carolina – Monica Jarrett (336) 373-7792



EWP Durham (Durham, Durham Co., NC): Emergency Watershed Protection (EWP) Streambank Stabilization

- Project Length: 1,100 LF
- Project Timeline: October 2021- July 2022
- Project Location: EWP-005 (South Ellerbe Creek), EWP-006 (Ellerbe Creek), EWP-007 (Northeast Creek Tributary C), EWP-008 (Third Fork Creek Tributary E)
- Project Summary: Performed all aspects of excavation and grading for stream banks, stream channel and floodplain; Installed stream diversion operations with pump around, installation of log j-hook vane, boulder toe, rock toe, ditch riprap stabilization, vegetated soil lifts, constructed riffles; Installation of live stakes, tublings, temporary and permanent seeding and mulching.
- Client Contact: City of Durham, North Carolina - Antwon Williams (919) 560-4326



West Branch Rocky River – Phase II (Davidson, Mecklenburg Co., NC): Stream Restoration, Stream Rehabilitation and Water Quality Improvements

- Project Length: 5,300 LF
- Project Timeline: September 2023 – October 2024
- Project Summary: This project rehabilitated approximately 5,300 linear feet of West Branch Rocky River and its riparian corridor. Work includes stream grading, installing rock and wood habitat and stabilization structures, erosion control measures, and buffer enhancement/riparian vegetation. Performed all aspects of excavation and grading for stream banks, stream channel and flood plain; installation of in-stream structures including rock cross vane, log cross vane, constructed riffle, rock and roll riffle, log riffle, log j-hook, log sill, rock toe protection, toe wood; Provided temporary and permanent seeding, live stakes, tubelings, herbaceous plugs, shrubs, and trees.
- Client Contact: Kimley-Horn – Jason Claudio-Diaz (704) 333-5131



Christiansburg Industrial Park (Christiansburg, Montgomery Co., VA): Stream Restoration and SWM Improvements

- Project Length: 1,500 LF
- Project Timeline: September 2023 – October 2024
- Project Summary: This project includes the restoration of approximately 700 LF of an unnamed intermittent stream and approximately 200 LF of an unnamed tributary flowing through the Christiansburg Industrial Park. Performed outfall infrastructure repair to stabilize slope, create stable outfall, repair erosion, and remove invasive species. Natural channel design techniques were utilized to develop a stable channel cross section, longitudinal profile, and planform geometry for the degraded stream channel. Installation of in-stream structures consisting of cross vanes, j-hooks, boulder pools, rock step pools, rock sill, log sill, and imbricated rock wall.
- Client Contact: Wetland Studies and Solutions, Inc.– Nathan Staley (540) 795-6180



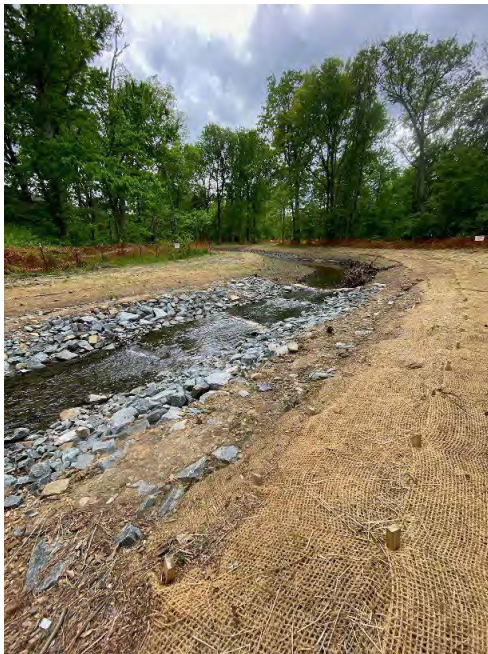
Difficult Run Tributary at Government Center (Fairfax Co., VA): Stream Restoration

- Project Length: 1,600 LF
- Project Timeline: August 2023 – December 2024
- Project Summary: The work includes the following: grading, excavation, fill, stream alignment, in-stream and log structure, and riparian corridor enhancement. Stream restoration structures included boulder riffle, floating wetlands, rock sill, constructed riffle, log sill, log vane, log/boulder habitat jacks, modified cross vane, pool root wad, step pool, toe wood, toe log, and wetland/floodplain habitat log. The work also includes restoration of the disturbed area with native species/landscaping, dredging of two stormwater ponds, and pedestrian trail rehabilitation.
- Client Contact: DPWES City of Fairfax, VA – Ian Vinson (703) 324-7080



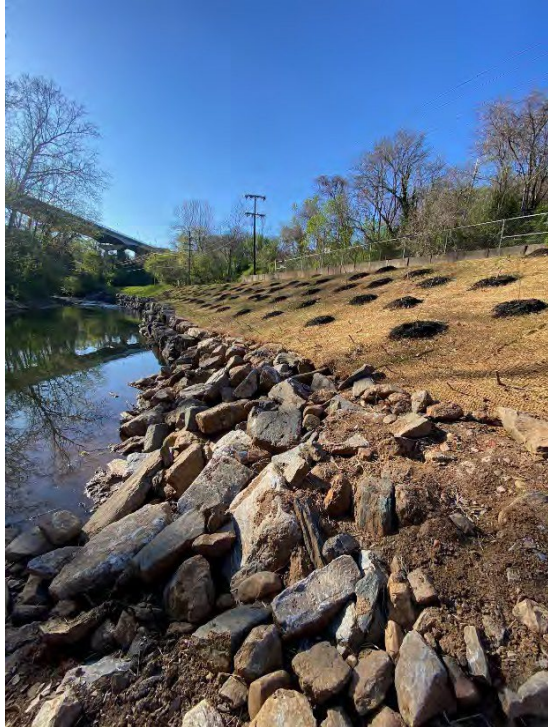
Sugarland Run South (Herndon, Fairfax Co., VA): Stream Restoration

- 1,120 LF
- Project Timeline: October 2022- April 2023
- Project Summary: Performed clearing and grubbing, removal of original asphalt trail; Performed all aspects of excavation and grading for stream banks, stream channel and floodplain; Installed stream diversion operations with pump around and maintenance of stream flow; Installation of in-stream structures, plunge pool, rock cross vane, offset rock cross vane, constructed riffles, rock vanes, rock toe, toe wood, rock channel storm sewer outfalls, rock channel tributary outfalls; Installation of erosion control matting, live stakes, riparian buffer planting, temporary and permanent seeding.
- Client Contact: WSP Engineering – Troy Biggs (703) 488-3700



Blackwater Creek (Lynchburg, Campbell Co., VA): Sewer Interceptor Bank Stabilization Phase II

- Project Timeline: December 2022 – April 2023
- Project Summary: Performed clearing and grubbing, sheet pile demolition and disposal; Performed all aspects of excavation and grading for stream banks, stream channel and floodplain; Import imbricated riprap, topsoil, and suitable fill for bank stabilization; Installed stream diversion operations with pump around, installation of imbricated rock wall and toe protection; Installation of erosion control matting, live stakes, temporary and permanent seeding and mulching, replacement of greenway trail.
- Client Contact: Wetland Studies and Solutions, Inc. – Nathan Staley (540) 795-6180



Narrows Lane S.W. Phase II (Roanoke, Co., VA): Stream Restoration and SWM Improvements

- Project Length: 1,000 LF
- Project Timeline: December 2024 – May 2025
- Project Summary: The Narrows Lane drainage improvement and channel restoration project begins at the existing roadside ditch/driveway culvert and continues downstream for approximately 700 linear feet before the existing culvert under Narrows Lane. The project is designed to address erosion and includes improvements to storm drain infrastructure along Narrows Lane, restore the stream's alignment and features to more natural conditions, remove two flood prone dwellings adjacent to the stream, reduce driveway flooding by removing multiple existing driveway culverts and replacing them with one continuous culvert, reduce the amount of discontinuous piping within the City's stormwater network.
- Client Contact: City of Roanoke, VA – Joseph Judy (540) 853-5909



Old Nine Mile (Henrico, Henrico Co., VA): Stream Restoration

- 1,132 LF
- Project Timeline: May 2022- December 2022
- Project Summary: The restoration utilized natural channel design (ncd) techniques, the stream was restored by utilizing priority level 2, raising the stream bed slightly and creating a bankfull bench within the confined valley. The existing channel was filled to create two oxbow wetlands along the downstream portion of the project, providing additional floodplain relief. The banks along the floodplain of the confined channel were graded back allowing for 2 to 1 slope, creating greater stability. KBS Earthworks, Inc. performed clearing, grubbing, and chipping mulch; Performed all aspects of excavation and grading for stream banks, stream channel and floodplain; Dewatering, removal of previously abandoned 18" RCP sanitary sewer; Installation of in stream structures such as, clay plug, brush toe, log sill, anchor boulder, rock sill, combination j-hook, floodplain woody debris; Installation of erosion control matting, upland buffer seeding and planting, riparian buffer seeding and planting, wetland shade seeding, and wetland forest planting.
- Client Contact: County of Henrico, Virginia – John Newton (804) 501-4168



Environmental Storm Water Projects (Gastonia, Gaston Co., NC): Stream Bank Stabilization

- Project Length: Hillcrest Avenue 37 LF- Restoration
 - Pine Creek Drive 44 LF-Restoration
 - Linda Street 120 LF-Restoration
 - Kentwood Drive- Conveyance swale
- Project Timeline: June 2018- December 2018
- Project Summary: performed all aspects of excavation and grading for stream banks, stream channel and floodplain; installed silt fence; installed stream diversion operations, pump around, log cross vane, log vane rock J-hook, rock step, riffle grade control, constructed riffle, installed coir fiber erosion control matting, installed 4" sch 40 PVC pipe, 4" HDPE corrugated pipe, 4" varmant guard, 4" HDPE drainage grate, invasive species control, live stakes, temporary/permanent non-riparian seeding.
- Client Contact: City of Gastonia Engineering Department- Dustin Ledford (704) 854-6698



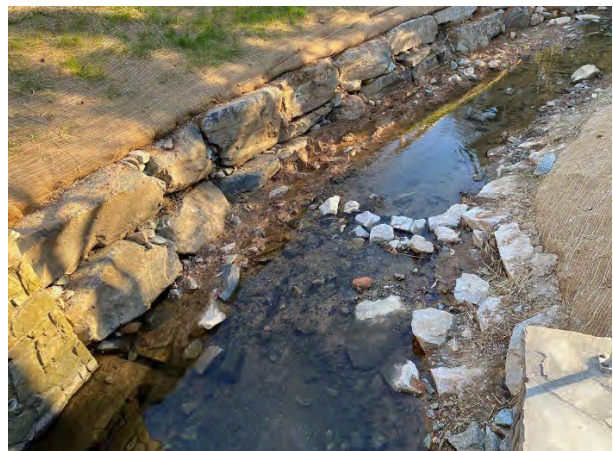
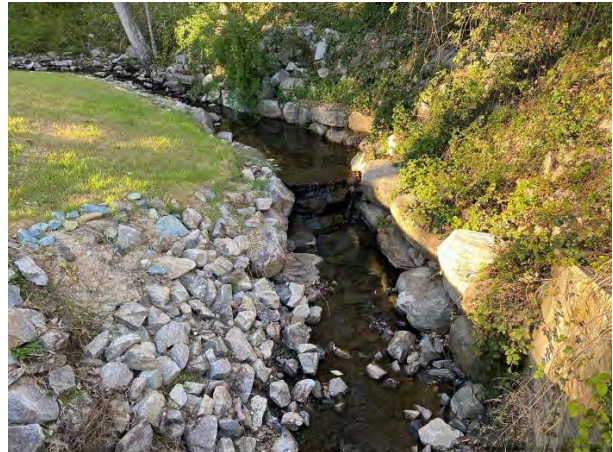
YMCA Cripple Creek (Hickory, Catawba Co., NC): Stream Restoration

- Project Timeline: April 2023 – May 2023
- Project Summary: Performed all aspects of excavation, rough and fine grading for banks; installed stream dewatering/diversion operations with pump around; Installation of drainage structures, riprap and surface stone replacement, completed rock excavation, and undercut; Completed fence repairs and replacement, Installation of plantings, temporary and permanent seeding.
- Client Contact: Catawba County, North Carolina – Tina Wright (828) 465-8224



Yorkgate Drive Bank Stabilization and West Drewry Channel Repair (Raleigh, Wake Co., NC): Stream Restoration

- Project Timeline: October 2022-December 2022
- Project Summary: Clearing, grubbing and selective tree removal; Performed all aspects of excavation and grading to repair and stabilize stream banks and stream channel; Removal of failing sculpted concrete and riprap; installation of both 30 LF and 20 LF of 7' boulder walls along each channel bank; performed channel bank grading and repairs to in-stream structures (boulder cross vane and rock step pool); Provided coir-net erosion control, temporary/permanent seeding, fertilizing, and mulching.
- Client Contact: City of Raleigh Engineering Department, North Carolina – Emily Smull (919) 996-5582



Lynchburg Drive (City of Newport News, VA): Streambank Stabilization

- Project Timeline: March 2022 – June 2022
- Project Location: 335 Lynchburg Drive – Newport News, Virginia 23606
- Project Summary: Performed clearing and grubbing, and demolition; Performed all aspects of excavation and grading to stabilize and restore banks and existing channel, hauled and installed stone (class I riprap, imbricated boulders, VDOT No.1, VDOT No.8) to stabilize bank, provided erosion and sediment control; provided vegetative transplants, and plantings.
- Client Contact: City of Newport News Department of Engineering – Marcus Clements (757) 570-5428



Northwest Raw Water Intake/ Swann Intake (City of Winston-Salem, NC): Riverbank Stabilization

- Project Timeline: May 2022 – July 2022
- Project Summary: Performed clearing and grubbing; demolition; Performed all aspects of excavation and grading to stabilize and restore riverbanks, hauled and installed stone (class I riprap, imbricated riprap) to stabilize banks; Installation of boulder toe and envirolok wall stabilization, provided erosion and sediment control; provided vegetative transplants, and plantings.
- Client Contact: Freese and Nichols, Inc. – Emily Brown (336) 899-9803



Norfolk Southern's Brosnan Forest Coldwater Branch Design-Build (Dorchester, SC): Stream Restoration

- Project Length: 33,976 LF
- Project Timeline: January 2021 – June 2023
- Project Summary: KBS partnered with EPR to construct this design-build project for Norfolk Southern Railway Company in Dorchester, SC. KBS performed clearing and grubbing; performed all aspects of excavation and grading for stream banks, stream channel and flood plain; installed stream diversion operations with pump-around operation, grade control woody riffle, constructed riffle (wetland outlet), log vane, log step, log roller, toe-wood, drop inlet structure; installation of temporary silt fence, tree protection fence, and temporary stream crossings. Constructed permanent ford stream crossings, installed single barrel and double barrel culvert crossings; Provided vegetation transplants, live staking, and temporary/permanent seeding.
- Project Owner: Norfolk Southern Railway Company – Joel Wells (843) 560-1768
- Project Architect: Ecosystem Planting and Restoration - Scott Hunt (919) 270-4646

