Upper Quittapahilla Creek Stream Restoration Projects

Project ID	Location	Length (feet)	Existing Problems	Proposed Solutions
1	Harold Wise Farm UPS of Birch Rd	1150	Livestock grazing impacts; unstable C4 channel with banks completely trampled, heavy sedimentation and aggradation throughout. No buffer.	Install fencing a minimum of 15 feet to either side of stream and install two (2) livestock crossings.
2	Quest, Inc UPS of Metro Drive	300	Minimal to no buffer.	Plant a minimum 15 riparian buffer along lawn area.
3	Lebanon Vocational Technology School Metro Drive to 8th Avenue	1450	Stable E4 channel with recently constructed wetland system on right and left floodplain areas.	Reconstruct wetland areas as a stormwater wetland basin to provide peak attenuation and water quality management.
4	Burger King and Yingst Exterminating UPS of Rte 422	300	Unstable F4 channel – moderately high eroding banks and aggradation throughout; No buffer.	Stabilize channel and establish 10 foot filter strip along top of both banks.
5	Rte 422 to 5th Avenue	1150	Unstable C4 and F4 channel sections – moderately high to high eroding banks, heavy sedimentation and aggradation throughout; minimal to no buffer	Restore as stableC4 and B4c streams Plant a minimum 20 foot riparian buffer.
6	5th Avenue to West Lincoln Avenue	2100	Unstable G4 and F4 channels with moderately high to high eroding banks, unconsolidated bed material and slag fill along left bank, heavy sedimentation and aggradation throughout, leachate seeping from left bank in several locations; concrete wall along right bank in upper section; minimal to no buffer	Remove unconsolidated material from bed and backfill with cobble/gravel mixture; remove slag fill from left bank to a depth of 15 feet and rebuild bank with clean soil; plant a minimum 20 foot riparian buffer along left bank; construct a stormwater wetland basin immediately upstream of W. Lincoln Ave. to provide peak attenuation and water quality management.

Project ID	Location	Length (feet)	Existing Problems	Proposed Solutions
7	West Lincoln Avenue to 4th Street	1300	Recovering F4/C4 channel with a concrete wall in upper section and moderate to moderate high eroding banks, heavy sedimentation and lateral bar, in upper and middle sections; minimal to no buffer	Remove concrete walls; restore as stableC4 and B4c streams; plant a minimum 20 foot riparian buffer. Evaluate existing SWM facilities at Bambergers, Mini Storage, Electric Substation, and Lebanon County Transit Authority for retrofitting to maximize on-site water quality management
8	4th St to 8th St	2300	Channelized C4/F4 transitioning to concrete flume in upper section. Concrete flume in middle and lower sections.	Evaluate existing SWM facilities at Federal Credit Union, Lebanon Valley Farmers Bank, Edward H. Arnold Library, and YMCA for retrofitting to maximize on-site water quality management
9	12th and Rte 422	2150	Concrete flume throughout.	Evaluate existing SWM facility at Lebanon Paper Box and Mfg Co for retrofitting to maximize on-site water quality management
10	DS of Route 419 at State Drive	500	Agricultural and golf course runoff; low base flow along downstream reaches.	Remove gravel road and create wetland system in adjacent fields to treat agricultural runoff, augment baseflow and create habitat
	Total	13,000		