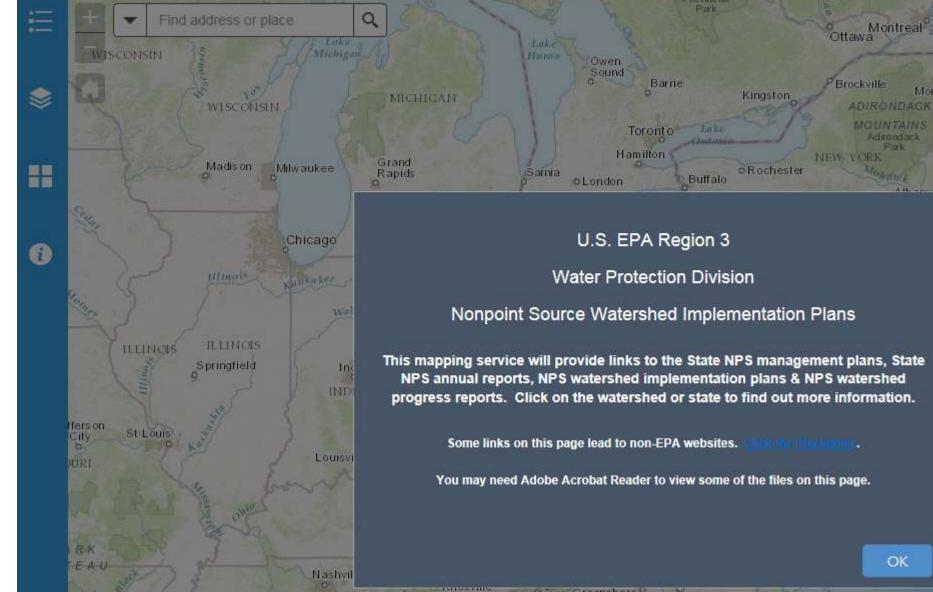
Annual 319 Program Grantees Meeting

Wednesday April 5, 2017

Nonpoint Source Watersheds



OK

Montpelier

Concord

ASSACHUSETTS & Boston

Hartford

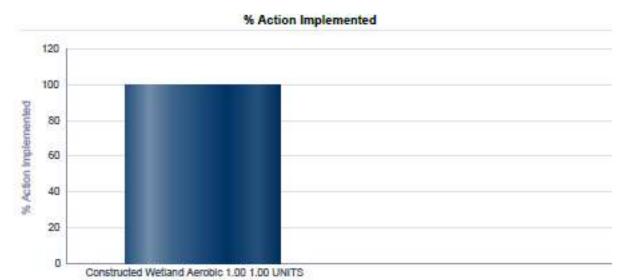
ork

Providence

Raleigh Greensboro

Blacks Creek PA Blacks Creek 1 3/23/2017

BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Constructed Wetland Aerobic	1.00	1.00	UNITS	100
	Ê.	2		

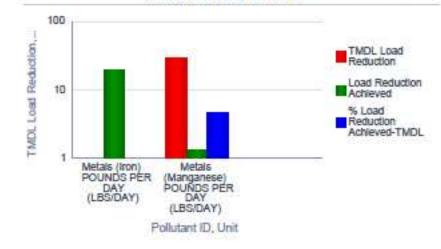


BMP/Action, Goal Amount, Implemented Amount, Unit

Blacks Creek PA Blacks Creek 1 3/23/2017

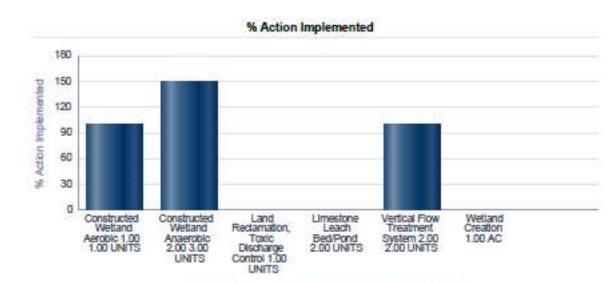
Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Metals (iron)	POUNDS PER DAY (LBS/DAY)		19.10	
Metais (Manganese)	POUNDS PER DAY (LBS/DAY)	28.70	1.30	5





Blacks Creek PA Blacks Creek 2 3/23/2017

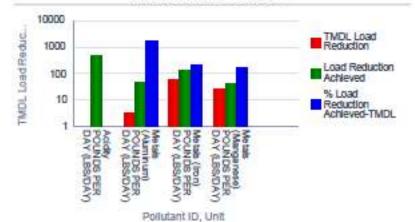
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Constructed Wetland Aerobic	1.00	1.00	UNITS	100
Constructed Wetland Anaerobic	2.00	3.00	UNITS	150
Land Reclamation, Toxic Discharge Control	5	1.00	UNITS	2
Limestone Leach Bed/Pond		2.00	UNITS	
Vertical Flow Treatment System	2.00	2.00	UNITS	100
Wetland Creation		1.00	AC	P



BMP/Action, Goal Amount, Implemented Amount, Unit

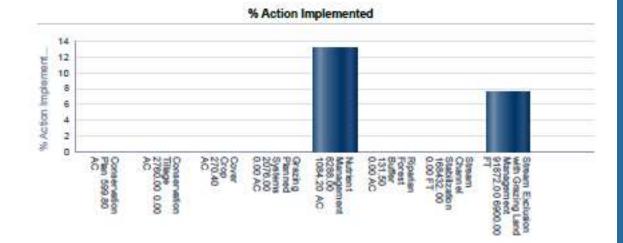
Blacks Creek PA Blacks Creek 2 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	0.00	477.10	
Metals (Aluminum)	POUNDS FER DAY (LBS/DAY)	3.00	46.00	1533
Metals (Iron)	POUNDS FER DAY (LBS/DAY)	59.00	122.60	208
Metals (Manganese)	POUNDS PER DAY (LES/DAY)	25.50	40.20	158



Buffalo Creek EastBufCr 3/23/2017

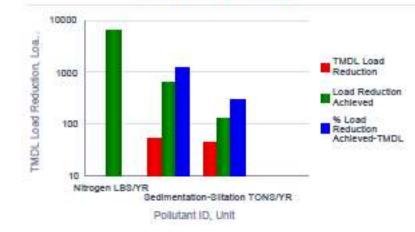
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action implemented
Conservation Plan		599.80	AC	
Conservation Tillage	2760.00	0.00	AC	0
Cover Crap	5	270.40	AC	
Grazing Planned Systems	2076.00	0.00	AC	0
Nutrient Management	8288.00	1084.20	AC	13
Riparian Forest Buffer	131.50	0.00	AC	0
Stream Channel Stabilization	168432.00	0.00	FT	Ö .
Stream Exclusion with Grazing Land Management	91872.00	6900.00	FT	8



BMP/Action, Goal Amount, Implemented Amount, Unit

Buffalo Creek EastBufCr 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	6402.60	
Phosphorus	LBS/YR	52.00	628.60	1209
Sedimentation-Siltation	TONS/YR	44.00	131.00	298



Buffaio Creek LittleBufCr 3/23/2017

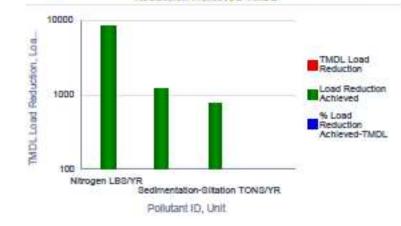
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Access Road		1400.00	SQUARE FEET	
Ag Land Retirement	S	308.10	AC	
Conservation Plan		883.50	AC	
Conservation Tillage	1316.00	658.20	AC	50
Cover Crop		774.20	AC	
Fence	2	4200.00	FT	
Heavy Use Area Protection		1865.00	SQUARE FEET	
Livestock Use Area Protection		2700.00	SQUARE FEET	
Nutrient Management	4842.00	578,40	AC	12
Prescribed Grazing	1800.00	7.70	AC	0
Riparian Forest Buffer	59.00	4.40	AC	7
Roof Runoff Management	2	160.00	FT	
Stream Channel Stabilization	204336.00	0.00	FT	0
Stream Exclusion with Grazing Land Management	73920.00	1200.00	FT	2
Stripcropping	S. Constant	270.50	AC	
Underground Outlet		350.00	FT	
Waste Storage Facility		1.00	UNITS	
Watering Facility		1.00	UNITS	
Wetand Restoration	2	0.75	AC	

% Action Implemented 60 3 50 40 8 30 Action 20 10 2 0 Accests Road 1400.00 SQUARE FEET Stream Cha Stabilization 204336.00 0.00 FT Waste Storage Fadity 100 UNITS Plan 883.50 AC Stripcingping 270.50 AC Wettand Restoration 0.75 AC Cover Crop 174.20 Herry Use Area Protection 1865.00 SQUARE FEET Apartan Foru Marian 59,00 3 12.00 12.00

BMP/Action, Goal Amount, Implemented Amount, Unit

Buffalo Creek LittleBufCr 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reducton Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	8361.90	
Phosphorus	LBS/YR	0.00	1181.70	
Sedimentation-Siltation	TONSMR	0.00	770.00	1

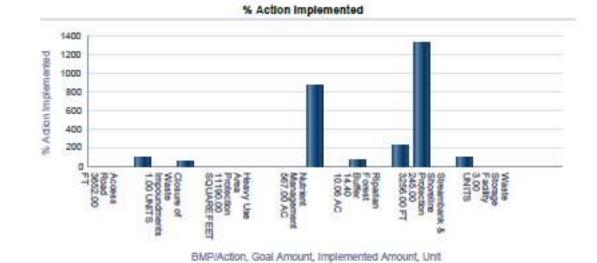


Buffalo Creek UNT 19034 3/23/2017

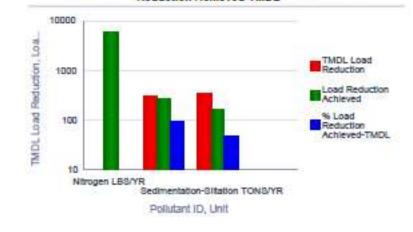
BMP(Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Access Road		3652.00	FT	
Animal Trails and Walkways		5485.00	SQUARE FEET	
Barnyard Runoff Management	3.00	3.00	UNITS	100
Closure of Waste Impoundments		1.00	UNITS	
Cover Crop	211.00	100.00	AC	47
Filter Strip		0.46	AC.	
Heavy Use Area Protection		11190.00	SQUARE FEET	
Livestock Stream Crossing		10.00	UNITS	
Manure Transfer		1.00	UNITS	
Nutrient Management		567.00	AC	[
Prescribed Grazing	8.00	70.00	AC	875
Riparian Butters - Vegetative		1.10	AC	
Riparian Forest Buffer	14,40	10.06	AC	70
Root Runoff Management		1974.00	FT	
Stream Exclusion with Grazing Land Management	11160.00	25577.00	FT	229
Streambank & Shoreline Protection	245.00	3256.00	FT	1329
Underground Outlet	1	360.00	FT	1000000
Waste Management System	3.00	3.00	UNITS	100
Waste Storage Facility		3.00	UNITS	
Watering Facility		1.00	UNITS	
Wetand Enhancement		2.00	AC	

Buffalo Creek UNT19034 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	5674.90	
Phosphorus	LBS/YR	298.00	282.60	95
Sedimentation-Siltation	TONSYR	346.00	163.90	47

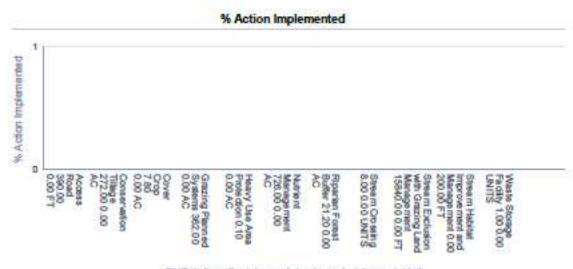


TMDL Load Reduction, Load Reduction Achieved, % Load Reduction Achieved-TMDL



Buffaio Creek RapidRun 3/23/2017

BMP/Action	Goal Amount	Implemented Amount	Unit	% Action implemented
Access Road	390.00	0.00	FT	0
Conservation Tillage	272.00	0.00	AC	0
Cover Crop	7.80	0.00	AC	0
Grazing Planned Systems	362.00	0.00	AC	0
Heavy Use Area Protection	0.10	0.00	AC	0
Nutrient Management	726.00	0.00	AC	0
Riparian Forest Buffer	21.20	0.00	AC	0
Stream Crossing	8.00	0.00	UNITS	0
Stream Exclusion with Grazing Land Management	15840.00	0.00	FT	0
Stream Habitat Improvement and Management	0.00	200.00	FT	
Waste Storage Facility	1.00	0.00	UNITS	0



BMP/Action, Goal Amount, Implemented Amount, Unit

Buffalo Creek RapidRun 3/23/2017

298.00	0.00	0
346.00	0.00	Q



Buffalo Creek WestBufCr 3/23/2017

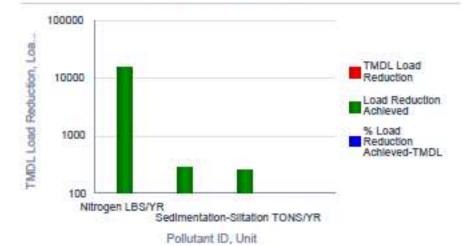
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Conservation Plan	1	486.10	AC	
Cover Crop	8 1	40.00	AC	



Buffalo Creek WestBufCr 3/23/2017

0.040		
SAR	15455.30	
S/YR	286.30	
NS/YR	250.60	
i		And a second sec

TMDL Load Reduction, Load Reduction Achieved, % Load Reduction Achieved-TMDL

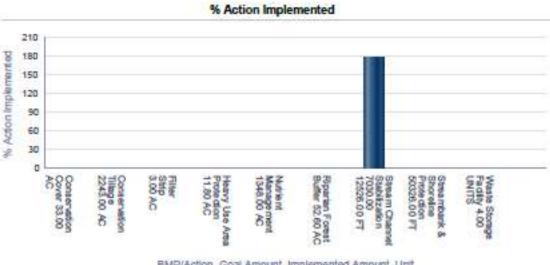


Codorus Creek EBrCodCr 3/23/2017

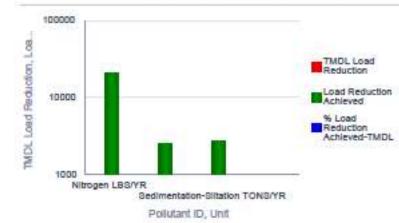
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Conservation Cover		33.00	AC	
Conservation Flan		1086.00	AC	
Conservation Tillage		2243.00	AC	
Cover Crop		43.00	AC	
Filter Strip		3.00	AC	
Grassed Waterway	2	7,40	AC	1
Heavy Use Area Protection	5	11.80	AC	
Livestock Stream Crossing		4.00	UNITS	1
Nutrient Management	2	1348.00	AC	1
Prescribed Grazing		179.40	AC	
Riparian Forest Buffer		52.60	AC	
Stormwater Management		25.00	AC	
Stream Channel Stabilization	7030.00	12526.00	FT	178
Stream Exclusion with Grazing Land Management		3700.00	FT	1
Streambank & Shoreine Protection		50326.00	FT	1
Stripcropping		374.00	AC	
Waste Storage Facility		4.00	UNITS	
Wetland Restoration	2	11.10	AC	1
		1	(100 m)	1

Codorus Creek EBrCodCr 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LB3/YR	0.00	20687.90	
Phosphorus	LBS/YR	0.00	2493.20	
Sedmentation-Silitation	TONS/YR	0.00	2708.70	

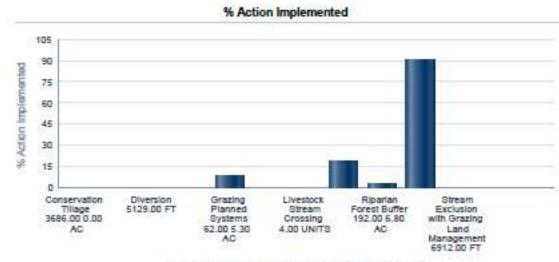


BMP/Action, Goal Amount, Implemented Amount, Unit



Codorus Creek OliCrCodCr 3/23/2017

BMP(Action	Goal Amount	Implemented Amount	Unt	% Action Implemented
Conservation Tillage	3686.00	0.00	AG	0
Contour Farming		113.00	AC	
Diversion		5129.00	FT	
Grassed Waterway		1.30	AC	
Grazing Planned Systems	62.00	5.30	AC	9
Heavy Use Area Protection	1	9.60	AC	
Livestock Stream Crossing		4.00	UNITS	
Nutrient Management	994.00	182.50	AC	18
Riparian Forest Buffer	192.00	6.80	AC	· · · · · ·
Stream Channel Stabilization	3000.00	2706.00	FT	90
Stream Exclusion with Grazing Land Management		6912.00	FT	1
Streambank & Shoreline Protection		5062.00	FT	C
	1		1	

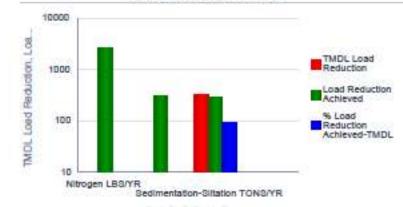


BMP/Action, Goal Amount, Implemented Amount, Unit

Codorus Creek OliCrCodCr 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	2569.20	2 · · · · · · · · · · · · · · · · · · ·
Phosphorus	LB3/YR	0.00	306.20	
Sedimentation-Siltation	TONS/YR	307.00	277.10	90

TMDL Load Reduction, Load Reduction Achieved, % Load Reduction Achieved-TMDL



Pollutant ID, Unit

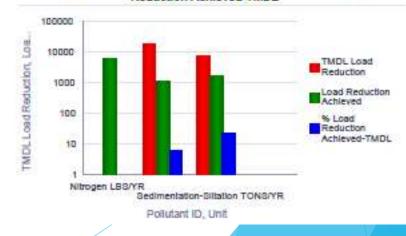
Codorus Creek SBrCodCr1 3/23/2017

BMPIAction	Goal Amount	Implemented Amount	Unt	% Action Implemented
Conservation Plan	12874.00	1225.00	AC	10
Conservation Tillage	12050.00	1240.40	AC	10
Contour Buffer Strips		93.00	AC	
Contour Farming		1484.00	AC.	1
Cover Crop		0.00	AC	
Diversion		8173.00	FT	
Filter Strip		8.30	AC	1
Grassed Waterway		8.90	AC	1
Heavy Use Area Protection		44.80	AC	
Nutrient Management	2286.00	1520.00	AC	66
Planned Grazing System	1335.00	390.50	AC.	29
Riparian Forest Buffer	402.00	26.86	AC	7
Stream Channel Stabilization	2296.00	6949.00	FT	303
Stream Exclusion with Grazing Land Management		2400.00	FT	
Stream Habitat Improvement and Management		0.00	FT	1.000
Streambank & Shoreline Protection	2296.00	28265.00	FT	1231
Stripcropping		619.40	AC	
Waste Storage Facility		9.00	UNITS	
Wetland Restoration	22.00	1.00	AC	5
		12		

Codorus Creek SBrCodCr1 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	6057.00	
Phosphorus	LBS/YR	17485.00	1092.30	6
Sedimentation-Siltation	TONSAR	7684.00	1627.50	21





Codorus Creek SBrCodCr2 3/23/2017

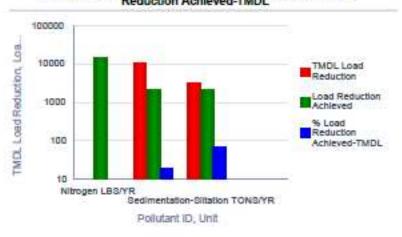
BMPlAction	Goal Amount	Implemented Amount	Unit	% Action Implemented
Conservation Plan	18471.00	2156.00	AC	12
Conservation Tillage	10911.00	2631.00	AC	24
Contour Buffer Strips	2	93.00	AC	
Contour Farming		1484.00	AC	1
Cover Crop	2	0.00	AC	
Diversion	S	8173.00	FT	
Filter Strip	2	8.30	AC	
Grassed Waterway	E.	9.80	AC	1
Heavy Use Area Protection		10.00	UNITS	Î
Heavy Use Area Protection		12.40	AC	
Nutrient Management	8497.00	1595.00	AC	19
Planned Grazing System	2399.00	148.40	AC	6
Porous Pavement	1	0.50	AC	
Raingarden/ bioretention basin		1.00	AC	
Riparian Forest Buffer	384.00	3.60	AC	1
Stream Channel Stabilization	2196.00	0.00	FT	0
Stream Exclusion with Grazing Land Management	2	2070.00	FT	
Stream Habitat Improvement and Management		0.00	FT	
Streambank & Shoreline Protection	2196.00	4063.00	FT	185
Stripcropping		464.00	AC	
Waste Storage Facility		9.00	UNITS	
Wetland Restoration	21.00	0.00	AC	0

% Action Implemented 210 77 180 150 120 % Action Impli 90 60 30 0 Wetland Restoration 21,00 0,00 AC 18471.00 2156.00 AC Filter Strip 8.30 AC Ansa Ansa Protection 12.40 AC Pavement 0.50 AC Steam Channel Statistics 2196.00 2196.00 FT Shreembar Shorefine Protection 2196.00 4063.00 F Farming 1484.00 AC 곗 10008 з iles.

BMP/Action, Goal Amount, Implemented Amount, Unit

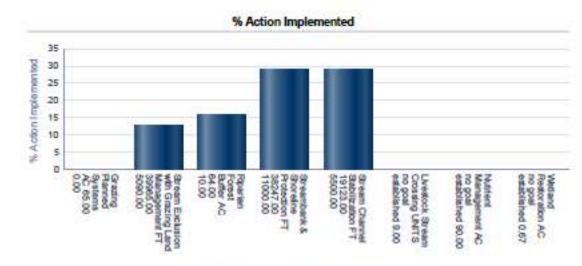
Codorus Creek SBrCodCr2 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LB3/YR	0.00	15249.60	-
Phosphorus	LBS/YR	10778.00	2064.30	19
Sedimentation-Siltation	TONS/YR	3199.00	2239.50	70



Conowingo Creek Conowingo5 3/23/2017

BMP/Action	Unit	Goal Amount	Implemented Amount	% Action Implemented
Grazing Planned Systems	AC	65.00	0.00	0
Stream Exclusion with Grazing Land Management	FT	39965.00	5090.00	13
Riparian Forest Buffer	AC	64.00	10.00	16
Streambank & Shoreline Protection	FT	38247.00	11000.00	29
Stream Channel Stabilization	FT	19123.00	5500.00	29
Livestock Stream Crossing	UNITS	no goal established	9.00	0
Nutrient Management	AC	no goal established	90.00	0
Wetland Restoration	AC	no goal established	0.67	0



8MP/Action, Unit, Goal Amount, Implemented Amount

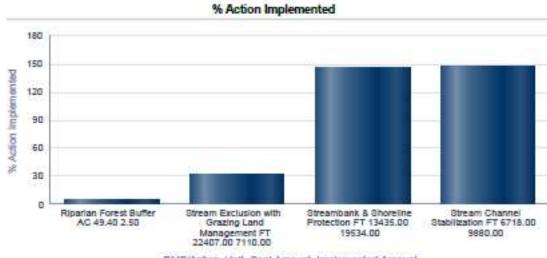
Ntrogen LBBYR 0.00 1911.20 Pollutant ID, Unit, TMDL Load Reduction, Load Reduction Achieved

Conowingo Creek Conowingo5 3/23/2017

Polutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LB8/YR	0.00	1911.20	
Phosphorus	LBS/YR	\$265.00	329.50	6
Sedimentation-Siltation	TONS/YR	557.00	146.50	26

Conowingo Creek Conowingo6 3/23/2017

BMP/Action	Unit	Goal Amount	Implemented Amount	% Action Implemented
Riparian Forest Buffer	AC	49.40	2.50	5
Stream Exclusion with Grazing Land Management	FT	22407.00	7110.00	32
Streambank & Shoreline Protection	FT	13435.00	19534.00	145
Stream Channel Stabilization	FT.	6718.00	9880.00	147

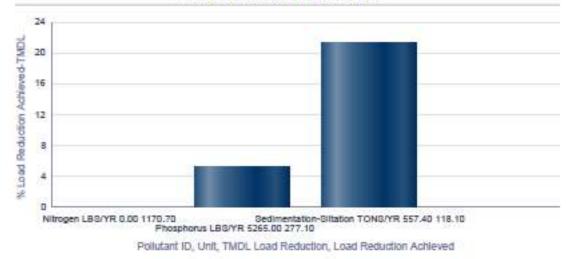


BMP/Action, Unit, Goal Amount, Implemented Amount

Conowingo Creek Conowingo6 3/23/2017

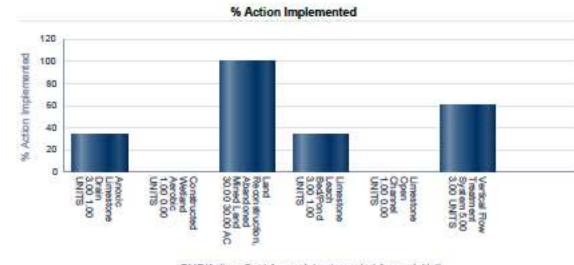
Polutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	1170.70	
Phosphorus	LBS/YR	5265.00	277.10	5
Sedimentation-Siltation	TONS/YR	557.40	118.10	21





Little Laurel Run LtiLau 3/23/2017

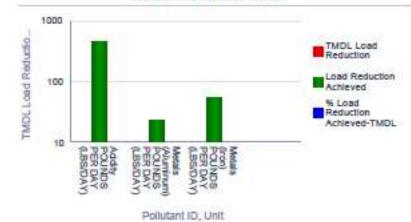
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Anoxic Limestone Drain	3.00	1.00	UNITS	33
Constructed Wetland Aerobic	1.00	0.00	UNITS	0
Land Reconstruction, Abandoned Mined Land	30.00	30.00	AC	100
Limestone Leach Bed/Pond	3.00	1.00	UNITS	33
Limestone Open Channel	1.00	0.00	UNITS	0
Vertical Flow Treatment System	5.00	3.00	UNITS	60



BMP/Action, Goal Amount, Implemented Amount, Unit

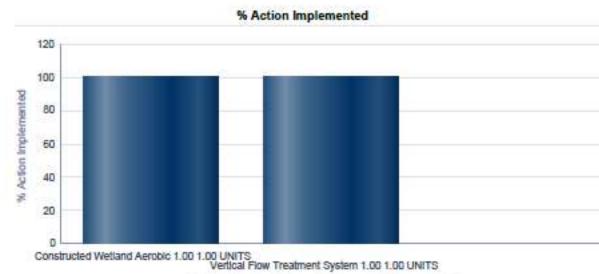
Little Laurel Run LtiLau 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)		451.50	
Metals (Aluminum)	POUNDS PER DAY (LBS/DAY)		23.70	
Metais (Iron)	POUNDS PER DAY (LBS/DAY)		53.50	
		1		



Longs Run PA Longs Run Site 62 3/20/2017

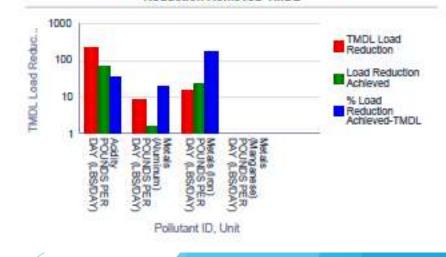
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Constructed Wetland Aerobic	1.00	1.00	UNITS	100
Vertical Flow Treatment System	1.00	1.00	UNITS	100



BMP/Action, Goal Amount, Implemented Amount, Unit

Longs Run PA Longs Run Site 62 3/20/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Addity	POUNDS PER DAY (LBS/DAY)	213.30	69.60	33
Metals (Aluminum)	POUNDS PER DAY (LBS/DAY)	8.10	1.60	20
Metais (Iron)	POUNDS PER DAY (LBS/DAY)	14.40	24.00	167
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	0.00		



Longs Run PA Longs Run Site 63 3/20/2017

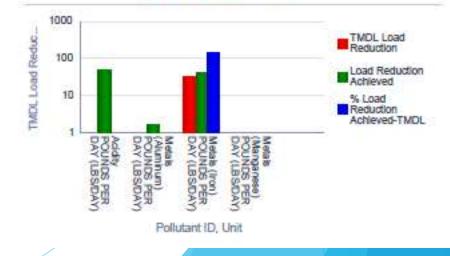
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Anoxic Limestone Drain	1.00	1.00	UNITS	100
Constructed Wetland Aerobic	1.00	1.00	UNITS	100
Limestone Leach Bed/Pond	2.00	2.00	UNITS	100



BMP/Action, Goal Amount, Implemented Amount, Unit.

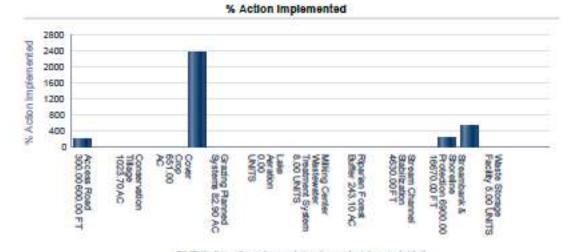
Longs Run PA Longs Run Site 63 3/20/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	0.00	47.80	
Metals (Aluminum)	POUNDS PER DAY (LBS/DAY)	0.00	1.60	
Metals (Iron)	POUNDS PER DAY (LBS/DAY)	31.10	42.00	135
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	0.00	0.00	



MIII Creek (Bradford) PA SFLkBradCo 3/23/2017

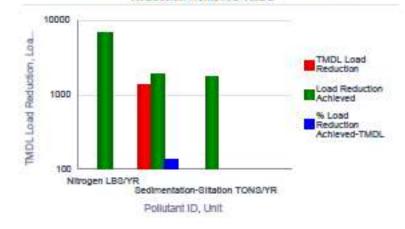
300.00	600.00	FT	200
	11.00	UNITS	
	1023.70	AC	
	867.00	AC	
	651.00	AC	
2000.00	47172.00	FT	2359
	82.90	AC	
4000.00	0.00	SQUARE FEET	0
	0.00	UNITS	
	8.00	UNITS	
	8.00	UNITS	
	5066.00	AC	
	243.10	AC	
1	3.00	UNITS	
	4530.00	FT	
	17713.00	FT	
6900.00	16670.00	FT	242
2.00	11.00	UNITS	550
	5.00	UNITS	
	21.70	AC	-
	4000.00	867.00 651.00 2000.00 47172.00 82.90 4000.00 0.00 4000.00 0.00 8.00 8.00 8.00 5066.00 243.10 3.00 4530.00 17713.00 6900.00 16670.00 2.00 11.00	867.00 AC 651.00 AC 2000.00 47172.00 FT 82.90 AC 4000.00 0.00 SQUARE FEET 0.00 UNITS 8.00 UNITS 900.00 16670.00 17713.00 FT 6900.00 16670.00 2.00 11.00 UNITS



BMP/Action, Goal Amount, Implemented Amount, Unit

Mill Creek (Bradford) PA SFLkBradCo 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	6746.50	
Phosphorus	LBS/YR	1341.00	1855.20	138
Sedimentation-Siltation	TONSYR	0.00	1751.10	1

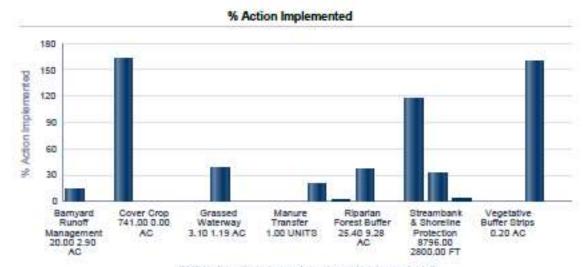


Mill Creek MillCrMuddy 3/23/2017

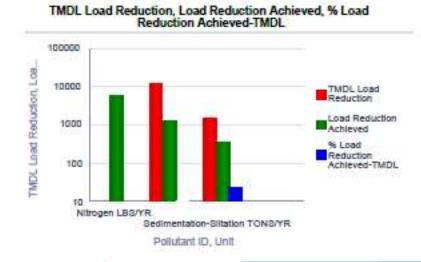
BMP/Action	Goal Amount	Implemented Amount	Unt	% Action implemented
Barnyard Runoff Management	20.00	2.90	AC	14
Conservation Plan		690.00	AC	
Conservation Tillage	544.00	884.00	AC.	163
Cover Crop	741.00	0.00	AC	0
Diversion		445.00	FT	
Filter Strip	1 minutes	0.20	AC	
Grassed Waterway	3.10	1.19	AC	38
Heavy Use Area Protection		0.02	AC	
Livestock Stream Crossing		5.00	UNITS	
Manure Transfer		1.00	UNITS	
Nutrient Management	1632.00	320.00	AC	20
Planned Grazing System	810.00	22.00	AC	3
Riparian Forest Buffer	25.40	9.28	AC	37
Roof Runoff Management	1	954.00	FT	
Stream Exclusion with Grazing Land Management	29040.00	34115.00	FT	117
Streambank & Shoreline Protection	8796.00	2800.00	FT	32
Stripcropping	1324.00	42.60	AC	3
Structure for Water Control	1	2.00	UNITS	
Vegetative Buffer Strips	1	0.20	AC	
Waste Storage Facility	10.00	16.00	UNITS	160

MII Creek MIICrMuddy 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	5704.60	
Phosphorus	LBS/YR	11910.00	1207.70	10
Sedimentation-Siltation	TONSIYR	1535.00	337.30	22

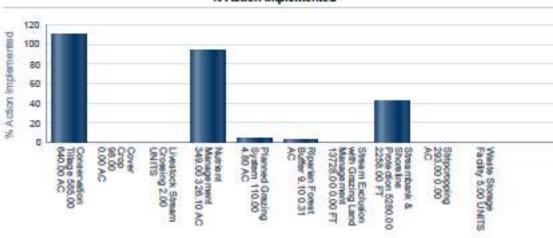


BMP/Action, Goal Amount, Implemented Amount, Unit



MIII Creek MIIICrUNT 3/23/2017

BMP(Action	Goal Amount	Implemented Amount	Unt	% Action Implemented
Conservation Tillage	585.00	640.00	AC	109
Cover Crop	98.00	0.00	AC	0
Livestock Stream Crossing		2.00	UNITS	
Nutrient Management	349.00	326.10	AC	93
Planned Grazing System	110.00	4.80	AC	4
Riparian Forest Buffer	9.10	0.31	AC	3
Stream Exclusion with Grazing Land Management	13728.00	0.00	FT	0
Streambank & Shoreline Protection	5280.00	2258.00	FT	43
Stripcropping	293.00	0.00	AC	0
Waste Storage Facility		5.00	UNITS	

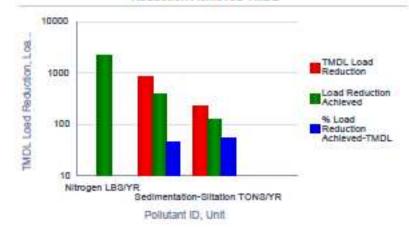


BMP/Action, Goal Amount, Implemented Amount, Unit

MII Creek MIICrUNT 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR		2170.50	
Phosphorus	LBS/YR	859.00	378.20	44
Sedimentation-Siltation	TONSAR	228.00	121.60	53

TMDL Load Reduction, Load Reduction Achieved, % Load Reduction Achieved-TMDL



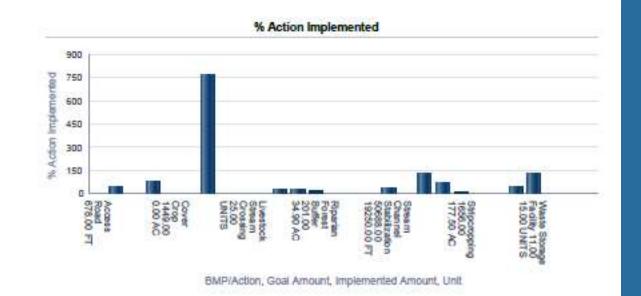
% Action Implemented

Mill Creek MillCrmain 3/23/2017

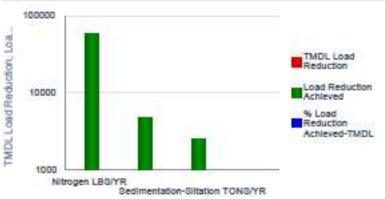
BMP/Action	Goal Amount	Implemented Amount	Unt	% Action Implemented
Access Road		678.00	FT	
Barnyard Runoff Management	42.00	20.00	UNITS	48
Conservation Plan	E. march	524.00	AC	
Conservation Tillage	1656.00	1269.00	AC	77
Cover Crop	1449.00	0.00	AC	0
Diversion		28.70	AC	
Grassed Waterway	17.00	131.40	AC	773
Heavy Use Area Protection		0.90	AC	
Livestock Stream Crossing		25.00	UNITS	
Manure Transfer		1.00	UNITS	
Nutrient Management	3765.00	1136.30	AC	30
Planned Grazing System	495.00	150.00	AC	30
Riparian Forest Buffer	201.00	34.90	AC	17
Roof Runoff Management		4419.90	FT	
Sedment Basin		1.00	UNITS	0
Stream Channel Restoration (Dam removal)		2.00	UNITS	
Stream Channel Stabilization	50688.00	19250.00	FT	38
Stream Crossing		1.00	UNITS	
Stream Exclusion with Grazing Land Management	79728.00	103729.00	FT	130
Streambank & Shoreline Protection	50688.00	35633.00	FT	70
Stripcropping	1656.00	177.50	AC	11
Тепасе	1	3264.00	FT	
Underground Outlet		850.00	FT	18
Waste Management System	22.00	11.00	UNITS	50
Waste Storage Facility	11.00	15.00	UNITS	135
Watering Facility		2,00	UNITS	
Wetland Restoration	1	8,00	AC	
00004771900000000	1		12.02	8

Mil Creek MillCrmain 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Nitrogen	LBS/YR	0.00	59665.40	
Phosphorus	LBS/YR	0.00	4762.80	
Sedimentation-Siltation	TONS/YR	0.00	2463.00	



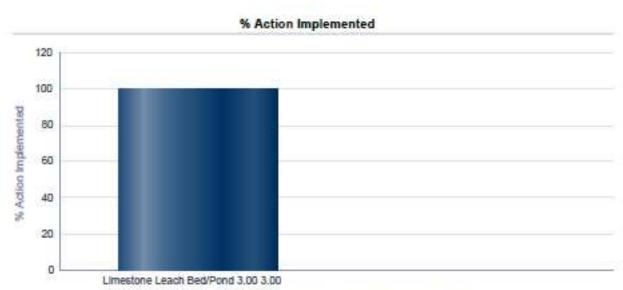




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Montgomery Creek PA MC UNT>MT1 3/23/2017

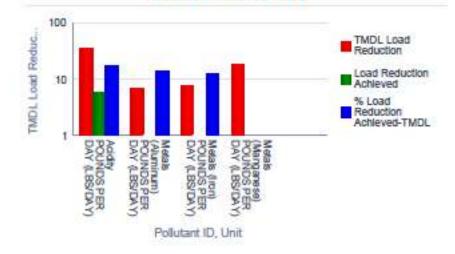
emented	% Action Impler	Unt	Implemented Amount	Goal Amount	BMP/Action
(100		3.00	3.00	Limestone Leach Bed/Pond
	100		3.00	3.00	Limestone Leach Bed/Pond



BMP/Action, Goal Amount, Implemented Amount, Unit

Montgomery Creek PA MC UNT>MT1 3/23/2017

DS PER DAY (LBS/DAY)	the second second billion of the second s	and the design of a part of the local data and the second s	
DO FEIT DAT (LUGIDAT)	35.20	6.00	17
DS PER DAY (LBS/DAY)	7.10	1.00	14
DS PER DAY (LBS/DAY)	8.00	1.00	13
DS PER DAY (LBS/DAY)	17.80	1	
	DS PER DAY (LBS/DAY)	DS PER DAY (LBS/DAY) 8.00	DS PER DAY (LBS/DAY) 8.00 1.00



Sandy Run PA Sandy Run Site 69 3/20/2017

BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Anoxic Limestone Drain	2.00	0.00	UNITS	0
Vertical Flow Treatment System	9.00	5.00	UNITS	56

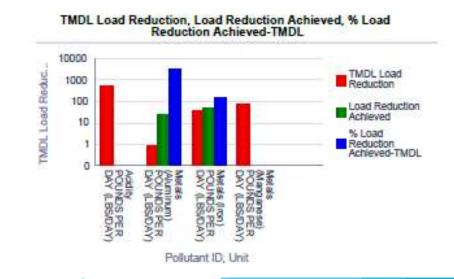


Anoxic Limestone Drain 2.00 0.00 UNITS Vertical Flow Treatment System 9.00 5.00 UNITS

BMP/Action, Goal Amount, Implemented Amount, Unit

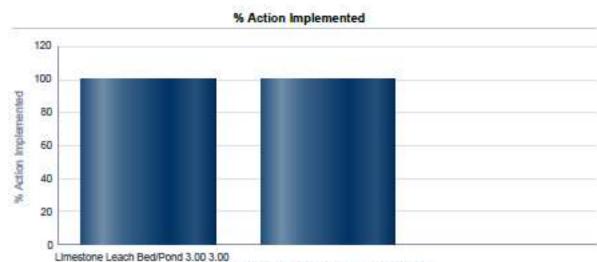
Sandy Run PA Sandy Run Site 69 3/20/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Addity	POUNDS PER DAY (LBS/DAY)	531.50	0.00	0
Metais (Aluminum)	POUNDS PER DAY (LBS/DAY)	0.80	25.10	3138
Metals (Iron)	POUNDS PER DAY (LBS/DAY)	33.20	45.00	136
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	66.40	0.00	0



Shoup Run Watershed PA Miller Run 3/23/2017

BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Limestone Leach Bed/Pond	3.00	3.00		100
Road Ditch Creation/ Improvements	2.00	2.00	MI	100

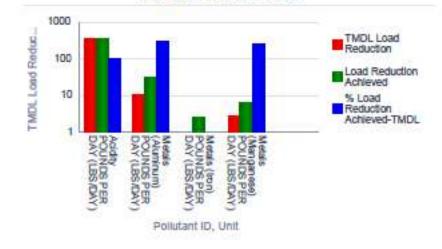


Road Ditch Creation/ Improvements 2.00 2.00 MI

BMP/Action, Goal Amount, Implemented Amount, Unit

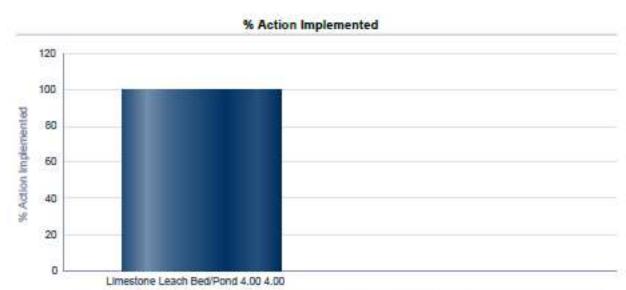
Shoup Run Watershed PA Miller Run 3/23/2017

Poilutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	327.00	326.70	100
Metals (Aluminum)	POUNDS PER DAY (LBS/DAY)	10.30	31.39	305
Metals (iron)	POUNDS PER DAY (LBS/DAY)	0.00	2.48	
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	2.60	6.49	250



Shoup Run Watershed PA Shoups Run 3/23/2017

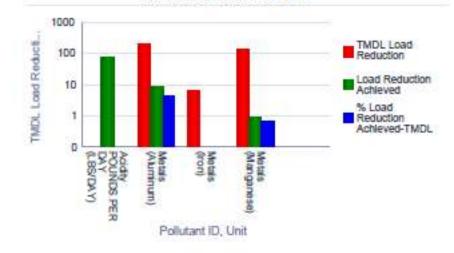
BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Limestone Leach Bed/Pond	4.00	4.00		100



BMP/Action, Goal Amount, Implemented Amount, Unit

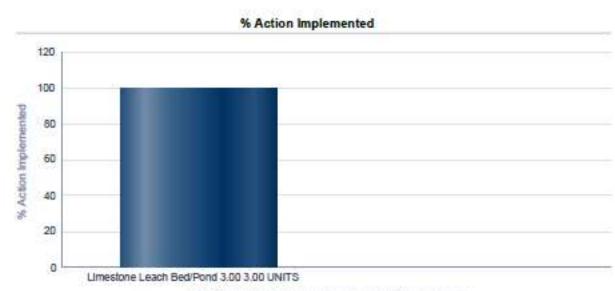
Shoup Run Watershed PA Shoups Run 3/23/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	-	72.83	
Metais (Aluminum)		198.30	8.65	4
Metals (Iron)		6.30		
Metais (Manganese)		129.20	0.87	:1



Six Mile Run PA Six Mile Run Site 54 3/20/2017

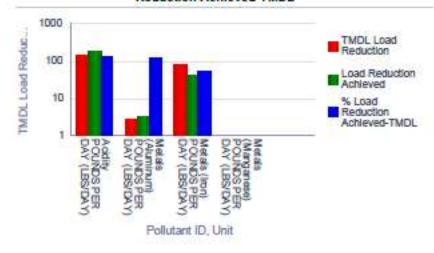
EMP/Action	Goal Amount	Implemented Amount	Unit	% Action implemented
Limestone Leach Bed/Pond	3.00	3.00	UNITS	100
Children Controlar one	0.00		C. T. C	100



BMP/Action, Goal Amount, Implemented Amount, Unit

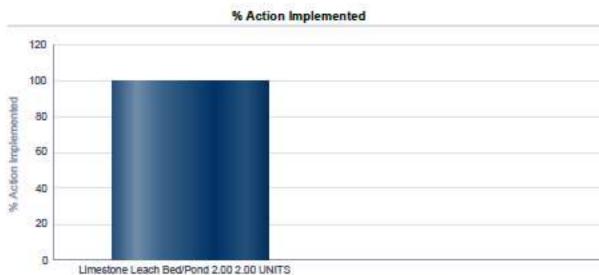
Six Mile Run PA Six Mile Run Site 54 3/20/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	145.70	183.70	126
Metais (Aluminum)	POUNDS PER DAY (LBS/DAY)	2.70	3.20	119
Metals (Iron)	POUNDS PER DAY (LBS/DAY)	79.20	41.36	52
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	0.00	0.00	



Six Mile Run PA Six Mile Run Site 57 3/20/2017

BMP/Action	Goal Amount	Implemented Amount	Unit	% Action Implemented
Limestone Leach Bed/Pond	2.00	2.00	UNITS	100

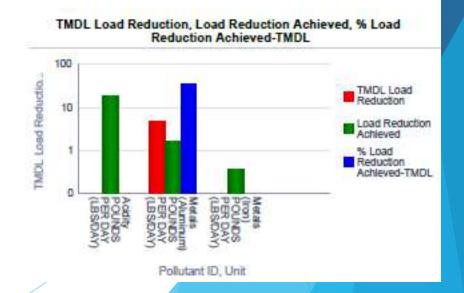


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BMP/Action, Goal Amount, Implemented Amount, Unit

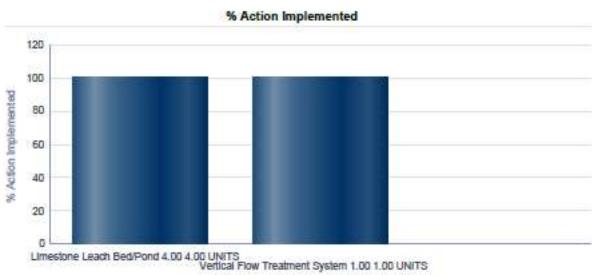
Six Mile Run PA Six Mile Run Site 57 3/20/2017

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMDL
Acidity	POUNDS PER DAY (LBS/DAY)	0.00	17.70	
Metais (Aluminum)	POUNDS PER DAY (LBS/DAY)	4.80	1.63	34
Metais (Iron)	POUNDS PER DAY (LBS/DAY)	0.00	0.37	



Six Mile Run PA Six Mile Run Site 68 3/20/2017

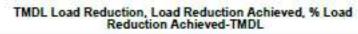
			% Action Implemented
4.00	4.00	UNITS	100
1.00	1.00	UNITS	100
			and a second

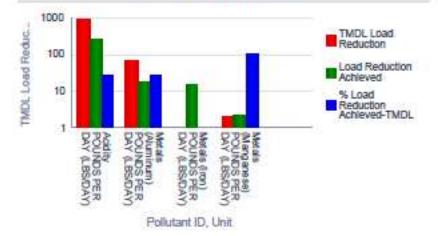


BMP/Action, Goal Amount, Implemented Amount, Unit

Pollutant ID	Unit	TMDL Load Reduction	Load Reduction Achieved	% Load Reduction Achieved-TMD
Addity	POUNDS PER DAY (LBS/DAY)	886.60	252.90	29
Metals (Aluminum)	POUNDS PER DAY (LBS/DAY)	65.90	17.69	27
Metals (Iron)	POUNDS PER DAY (LBS/DAY)	0.00	15.47	
Metals (Manganese)	POUNDS PER DAY (LBS/DAY)	2:10	2.18	104

Six Mile Run PA Six Mile Run Site 68 3/20/2017





Nonpoint Source Success Stories

Success Stories

About Success Stories

This Nonpoint Source Success Stories web

site features stories about primarily nonpoint source-impaired waterbodies where restoration efforts have led to documented water quality improvements. **Waterbodies are separated into three categories of stories**, depending on the type of water quality improvement achieved:





NONPOINT SOURCE SUCCESS STORY

Lake Wallenpaupack Improves After Best Management Practices and Outreach are Implemented to Reduce Nonpoint Source Pollution

Waterbody Improved

Excess nutrients from agricultural and road runoff impaired Lake Wallenpaupack, one of Pennsylvania's most important recreational

NNSHIVANI

resources. As a result, Pennsylvania Department of Environmental Protection (PADEP) added the lake to its 1996 Clean Water Act (CWA) section 303(d) list of impaired waters. Providing technical assistance and implementing best management practices (BMPs) reduced phosphorous levels and has improved water quality. As a result, PADEP removed Lake Wallenpaupack from Pennsylvania's list of impaired waters in 2016.



NONPOINT SOURCE SUCCESS STORY

Reclaiming Abandoned Mine Lands Reduces Impact of Acid Mine Drainage in the Bennett Branch Basin

Waterbodies Improved

Acid mine drainage (AMD) degraded water quality in Pennsylvania's Bennett Branch Sinnemahoning Creek. As

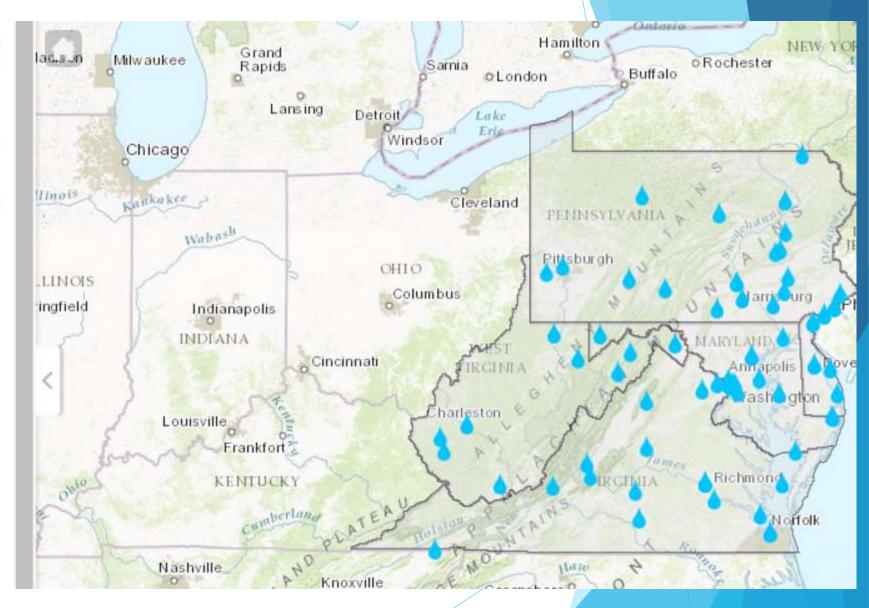
a result, Pennsylvania added the stream to its 1996 Clean Water Act (CWA) section 303(d) list of impaired waters for high metal concentrations. To address the AMD problem, significant partnerships were developed with the mining industry to accomplish mine reclamation and to use recoverable coal and waste coal resources. Water quality in Bennett Branch has dramatically improved after restoration, with decreased metal concentrations and increased alkalinity.

Stories of Progress in Achieving Healthy Waters

Click on the blue water droplets* for examples of how the U.S. Environmental Protection Agency (EPA) is working with partners to make a positive difference in Mid-Atlantic communities by restoring rivers and streams, protecting drinking water sources and more.

View a list of the state stories of progress by clicking on the links below: <u>Delaware</u>, <u>District of Columbia</u>, <u>Maryland</u>, <u>Pennsylvania</u>, <u>Virginia</u>, and <u>West Virginia</u>

Program contact: <u>Damm.Thomas@epa.gov</u> Technical contact: <u>Pruzinsky.Amanda@epa.gov</u>



Turning Main Street into a Green Street

Stories of Progress in Achieving Healthy Waters

U.S. EPA Region 3 Water Protection Division Etna, Pennsylvania • November 12, 2015



The Pennsylvania Nonpoint Source Pollution Management Program <u>Annual Report</u>

FFY 2016

October 1, 2015 through September 30, 2016

