Lancaster County

MILESTONE SCENARIO UPDATE 09/28/2021

Lancaster County Potential BMP's

Sector	BMP Name	BMP Quantity	New or Total
Agriculture	Soil Conservation and Water Quality Plans	247,167	Total Acres
Agriculture	Nutrient Management Core N	215,324	Total Acres
Agriculture	Nutrient Management Core P	214,784	Total Acres
Agriculture	Tillage Management-High Res	110,570	Total Acres
Agriculture	Tillage Management-Conservation	78,129	Total Acres
Agriculture	Cover Crop Traditional	43,559	Total Acres
Agriculture	Cover Crop Traditional with Fall Nutrients	100,000	Total Acres
Agriculture	Cover Crop Commodity	11,241	Total Acres
Agriculture	Prescribed Grazing	12,603	Total Acres
Agriculture	Nutrient Management N Rate	6,661	Total Acres
Agriculture	Nutrient Management N Placement	6,661	Total Acres
Agriculture	Nutrient Management N Timing	6,661	Total Acres
Agriculture	Nutrient Management P Rate	6,661	Total Acres
Agriculture	Nutrient Management P Placement	6,661	Total Acres
Agriculture	Nutrient Management P Timing	6,661	Total Acres
Agriculture	Manure Incorporation	10,000	Total Acres
Agriculture	Forest Buffer	8,555	Total Acres
Agriculture	Forest Buffer-Narrow	100	Total Acres
Agriculture	Grass Buffer-Streamside with Exclusion Fencing	2,500	Total Acres

Lancaster County Potential BMP's

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Sector	BMP Name	BMP Quantity	New or Total
Agriculture	Grass Buffer	8,800	Total Acres
Agriculture	Non-urban Stream Restoration	138,948	Total LF
Agriculture	Wetland Creation	56	Total Acres
Agriculture	Wetland Restoration	396	Total Acres
Animals	Manure Storage Facilities	263,088	New AUs
Animals	Manure Transport out of Lancaster County	149,536	Total Dry Tons
Animals	Manure Treatment Technologies	20,000	Total Tons
Animals	Dairy Precision Feeding	500	Total AUs
Developed	Urban Riparian Forest Buffers	256	Total Acres
Developed	Conservation Landscaping	125	Total Acres
Developed	Urban Forest Planting	27	Total Acres
Developed	Urban Tree Canopy	10	Total Acres
Developed	Urban Stream Restoration	35,180	Total LF
Developed	Advanced Grey Infrastructure IDD&E Control	23,772	Total Acres
Developed	Runoff Reduction Stormwater Performance Stds	6,205	New Acres
Developed	Stormwater Treatment Stormwater Performance Stds	158	New Acres
Developed	Wet Ponds and Wetlands	948	Total Acres
Developed	Infiltration Practices	693	Total Acres

Lancaster County Potential BMP's

Sector	BMP Name	BMP Quantity	New or Total
Developed	Bioretention/rain gardens	394	Total Acres
Developed	Bioswale	1,389	Total Acres
Developed	Vegetated Open Channels	442	Total Acres
Developed	Filtering Practices	137	Total Acres
Developed	Filter Strip Runoff Reduction	10	Total Acres
Developed	Dry Ponds and Hydrodynamic Structures	396	Total Acres
Developed	Extended Dry Detention Basin	7,253	Total Acres
Developed	Street Sweeping	155	Total Acres
Developed	Permeable Pavement	8.3	Total Acres
Developed	Storm Drain Cleanout	29,613	Total
Developed	Impervious Surface Reduction	58	Total Acres
Developed	Urban Nutrient Management	10,577	Total Acres
Developed	Septic Pumpouts	10,000	Total
Developed	Septic Connections	3,008	Total
Developed	Dirt & Gravel Road-Driving Surface + Raising the Roadbed	224,245	Total LF
Agriculture	Barnyard runoff Control	1,222	Total Acres

Lancaster County BMP Scenario Reductions

	Nitrogen (Ibs/year)	Phosphorus (lbs/year)	Nitrogen To be Reduced		Phosphorus
Current Load	27,466,000	1,321,000	25%		7%
BMP Scenario Reduction	8,827,000	485,000			
BMP Scenario Load	18,639,000	836,000		Reduced 75%	
2025 Planning Target Load	15,729,000	797,000	Snapshot (CAST17)	Nitrogen 80%	Phosp
			Milestone Update 09/01/21	75%	

Lancaster County Reductions by Sector

	Nitrogen (lbs/yr)	Phosphorus (lbs/yr)			
Agriculture	8,307,000	406,000			
Developed	121,000	4,000			
Natural	104,000	48,000			
Septic	20,000	-			
Wastewater	275,000	27,000			

Lancaster County Proposed BMPs compared to State Recommendations

			Current BMP's (2019 progress)	County Proposed BMP's	County State Recommendati ons	% of State Rec.
Agriculture Practices	Duration	Unit		2 0	0.10	
Nutrient Application Management Core Nitrogen	annual	Acres	68,206	215.324	224,704	96%
Nutrient Application Management Rate Nitrogen	annual	Acres	134	6.661	39.297	17%
Nutrient Application Management Placement Nitrogen	annual	Acres	-	6.661	49,121	14%
Nutrient Application Management Timing Nitrogen	annual	Acres	_	6,661	55,016	
Nutrient Application Management Core Phosphorus	annual	Acres	31,245	214,784	,	
Nutrient Application Management Rate Phosphorus	annual	Acres	-	6,661	39,297	17%
Nutrient Application Management Placement Phosphorus	annual	Acres	-	6,661	39,297	17%
Nutrient Application Management Timing Phosphorus	annual	Acres	-	6,661	39,297	17%
			TT			
Conservation Tillage	annual	Acres	64,257	78,129		
High Residue Tillage	annual	Acres	29,613	110,570	97,963	113%
Low Residue Tillage	annual	Acres	51,393	-	-	
Conservation + LowResidue + High Residue Tillage	annual	Acres	145,262	188,699	135,190	140%
Cover Crop	annual	Acres	40,983	43,559	,	219%
Cover Crop with Fall Nutrients	annual	Acres	4,951	100,000		145%
Commodity Cover Crop	annual	Acres	-	11,241		
Commodity + Cover Crop	annual	Acres	45,934	154,800	88,918	174%
Pasture Alternative Watering	cumulative	Acres	4,439	4,511	4,819	94%
Prescribed Grazing	cumulative	Acres	2,789	12,603	16,097	78%
Forest Buffers on Fenced Pasture Corridor	cumulative	Acres in Buffers	2	2	2,637	0%
Grass Buffers on Fenced Pasture Corridor	cumulative	Acres in Buffers	68	2,569	956	269%
Pasture Management Composite	cumulative	Acres	7,298	19,685	24,509	80%

Lancaster County Proposed BMPs compared to State Recommendations

			Current BMP's (2019 progress)	County Proposed BMP's	County State Recommendatio ns	% of State Rec.
Agriculture Practices	Duration	Unit				
Forest Buffers	cumulative	Acres in Buffers	1,533	8,655	9,676	89%
Wetland Restoration	cumulative	Acres	150	396	549	72%
Wetland Creation	cumulative	Acres	36	56	55	101%
Land Retirement	cumulative	Acres	1,436	1,402	2 2,757	51%
Grass Buffers	cumulative	Acres in Buffers	8,724	8,800	13,852	64%
Tree Planting	cumulative	Acres	747	746		262%
Soil and Water Conservation Plan	cumulative	Acres	70,375	247,167	233,052	106%
Manure Incorporation	annual	Acres	-	10,000		
Agricultural Drainage Management	cumulative	Acres	5,683	5,663		
Non Urban Stream Restoration	cumulative	Feet	62,173	138,948	82,662	168%
Livestock Waste Management Systems	cumulative	Animal Units	58,521	318,477	305,926	104%
Poultry Waste Management Systems	cumulative	Animal Units	381,365	417,837	427,261	98%
Livestock + Poultry Waste Management Systems	cumulative	Animal Units	439,886	736,315	5 733,188	100%
Poultry Mortality Composting	cumulative	Animal Units	18,322	20,115	5 20,065	100%
Barnyard Runoff Control + Loafing Lot Management	cumulative	Acres	1,199	1,223	3 1,326	92%
Ag Stormwater Management	cumulative	Acres Treated	_			
Manure Transport Out Of Area	annual	Dry Tons	11,501	149,067	7 102,585	145%
Manure Transport Into Area	annual	Dry Tons	7,861	8,957	6,779	132%
Dairy Precision Feeding	annual	Animal Units	_	500) 103,854	0%

Lancaster County Proposed BMPs compared to State Recommendations

Urban/Suburban Practices	Duration	Unit	Current BMP's (2019 porgress)	County Proposed BMP's	County State Recommendati ons	% of State Rec.
Runoff Reduction Performance Standard	cumulative	Acres Treated	4,767	10,972	11,095	99%
Storm Water Treatment Performance Standard	cumulative	Acres Treated	304	462	613	75%
Wet Ponds & Wetlands	cumulative	Acres Treated	-	948	307	309%
Dry Ponds	cumulative	Acres Treated	-	396	731	54%
Extended Dry Ponds	cumulative	Acres Treated	-	7253	618	1174%
Infiltration Practices	cumulative	Acres Treated	5	693	29	2395%
Filtering Practices	cumulative	Acres Treated	-	137	49	278%
BioRetention	cumulative	Acres Treated	1	394	621	63%
BioSwale	cumulative	Acres Treated	-	1389	1,719	81%
Permeable Pavement	cumulative	Acres Treated	-	8	0	4082%
Vegetated Open Channel	cumulative	Acres Treated	10	442	525	84%
Urban Filter Strips	cumulative	Acres Treated	-	10	-	
Grey Infrastructure(IDDE)	annual	Acres Treated	-	23772	23,596	101%
Conservation Landscaping Practices	cumulative	Acres Treated	-	125	484	26%
Stormwater Management Composite	cumulative	Acres Treated	5,087	38,814	40,391	96%
Erosion and Sediment Control	annual	Acres	460	863		
Impervious Surface Reduction	cumulative	Acres	-	58		106%
Urban Forest Buffers	cumulative	Acres in Buffers	112	256		61%
Urban Tree Planting	cumulative	Acres	24	10		
Urban Forest Planting	cumulative	Acres	-	27		
Urban Nutrient Management	annual	Acres	-	10,577		
Urban Stream Restoration	cumulative	Feet	1	35,180	23,893	147%
Storm Drain Cleanout	annual	Lbs of Sediment	-	29,613		95%
Street Sweeping	annual	Acres	-	155	68	226%
Septic Connections	cumulative	Number of Systems	363	3,008		
Septic Pumping	annual	Number of Systems		10,000		

Questions?

FOR ADDITIONAL QUESTIONS PLEASE REACH OUT TO THE PA DEP CHESAPEAKE BAY OFFICE RESOURCE ACCOUNT AT

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