

Disclaimer:

The Best Management Practices (BMP) Input deck developed by the Central Shenandoah Planning District Commission (CSPDC) for the Virginia Department of Environmental Quality (DEQ) Local Area Planning effort solely represents a theoretical implementation of BMPs by 2025, strictly for the unregulated developed (non-MS4), natural, and septic sectors, based upon information supplied to the CSPDC by the DEQ as of June 2018. This theoretical scenario is just one of hundreds of possibilities that may, or may not, occur between now and 2025 in the unregulated developed (non-MS4), natural, and septic sectors. Furthermore, this submittal does not represent any commitment, by any of the local governments within the CSPDC region, to implement or fund the BMP's, Programmatic Actions or Strategies.

Central Shenandoah PDC

Sector	LAPG BMPs (grey background are Annual BMPs)	Unit	2017-As of 06/30/17	WIP 2-Meets LAPGs	2025 Available (Max Extent)	(4) WIP 3 EDIT - 8/31/2018	(Scenario 9) WIP 3 - 9/20/2018	FINAL WIP 3 Scenario 11/09/2018	Notes
Developed	Advanced Grey Infrastructure Nutrient Discovery Program (IDDE)	acres	-	-	97,593				impractical
Developed	Bioretention/raingardens - A/B soils	acres	89	3,593	145,187	4,000	3593	3593	more raingardens than bioretention
Developed	Bioretention/raingardens - C/D soils	acres	2	-	1,510	1,500	1000	1000	more raingardens than bioretention
Developed	Bioswale	acres	26	-	145,085	3,500	3000	3000	useful in unregulated areas
Developed	Dirt & Gravel Road Erosion & Sediment Control	feet	-	113	36,440				
Developed	Dirt & Gravel Road Erosion & Sediment Control - Outlets	feet	-	276	18,220				
Developed	Dry Detention Ponds and Hydrodynamic Structures	acres	1,210	7,098	145,187	1,500	1210	1210	not favored & likely to decrease
Developed	Dry Extended Detention Ponds	acres	213	13,433	145,187	1,000	250	213	not favored - not high nitrogen reduction , low co benefits
Developed	Erosion and Sediment Control Level 1	acres	33	446	1,130	33	33	33	
Developed	Erosion and Sediment Control Level 2	acres	-	-	1,130				
Developed	Erosion and Sediment Control Level 3	acres	-	-	1,130				
Developed	Filtering Practices	acres	22	7,769	145,187	40	40	40	see some use of this BMP but minimal
Developed	Floating Treatment Wetland 50% Coverage of Pond	acres	-	-	145,187				
Developed	Forest Buffer	acres	-	397	84,063	1,000	8,406.00	5,884.41	increase: 7% of max (some homeowners may not want buffer)
Developed	Forest Planting	acres	-	99	84,063	300	150	150	possibility for urban area
Developed	Impervious Surface Reduction	acres	-	3,226	49,378	100	4938	3456	increase: 7% of max, would like to do more of if funding available
Developed	Infiltration	acres	15	7,126	290,346	7,126	10,000	10,000	need more guidance, currently do not use due to karst topo. -soil testing required, intended for small drainage areas
Developed	Nutrient Management Plan	acres	710	47,866	97,593	25,000	50,000	50,000	can be used at HOAS, schools, recreational areas. Etc
Developed	Permeable Pavement	acres	1	7	290,094	1	100	100	expensive but could be used in unregulated areas if funding available.
Developed	Storm Drain Cleaning	pounds	-	-	290,374		290,374	290,374	max out
Developed	Stormwater Performance Standard-Runoff Reduction	acres	22	-	145,186	100	100	100	
Developed	Stormwater Performance Standard-Stormwater Treatment	acres	51	-	145,054	51	51	51	
Developed	Street Cleaning (annual)	acres	-	1,094	23,027	2,500	23027	23027	max out
Developed	Tree Planting - Canopy	acres	-	-	7,319	500	7319	5,884.41	7% of max (wrong max amount)
Developed	Vegetated Open Channels - A/B	acres	2	177	261,000	5,000	177	177	need more info on grass channels - do all existing grass ditches count? Does it follow grass channel specs?
Developed	Vegetated Open Channels - C/D	acres	-	-	-	10,000	-	-	need more info on grass channels before submitting value
Developed	Wet Ponds and Wetlands	acres	227	13,728	145,187	6,000	800	800	cost effective for people with big unregulated areas
Natural	Algal Flow-way Non-Tidal	acres	-	-	145,187		0		
Natural	Urban Stream Restoration	feet	-	10,563	14,352,086	50,000	100,000	100,000	expensive but aesthetically pleasing, lots of co-benefits, well-received by community
Natural	Wetland Enhancement	acres	-	-	7,753	50	200	200	
Natural	Wetland Rehabilitation	acres	-	-	7,753	250	50	50	
Septic	Septic Connection	systems	115	5,192	47,526	1,000	615	615	
Septic	Septic Denitrification-Conventional	systems	455	9,218	42,431	455	755	755	VDH reco
Septic	Septic Denitrification-Enhanced	systems	63	-	42,417	63	463	463	VDH reco
Septic	Septic Pumping (annual)	systems	172	7,741	42,431	8,486	42431	8486	20% 5 year -but have to be some regulation attached to this BMP. - contract out?
Septic	Septic Secondary Treatment Conventional	systems	126	-	42,431	126	146	146	VDH reco
Septic	Septic Secondary Treatment Enhanced	systems	8	-	42,431	8	108	108	VDH reco
Growth	Agricultural Conservation Policy	County	-	-	All				
Growth	Forest Conservation Policy	County	-	-	All				
Growth	Growth Management Policy	County	-	-	All	Yes	Yes	Yes	

MEETS LAPG

57,000 lbs short 105,000+ N lbs over!

14,417 Nitrogen lbs over LAPG

156 Phosphorus lbs over LAPG