

## POLLUTANT AGGREGATION SUGGESTIONS FOR MS4 REQUIREMENTS TABLE INSTRUCTIONS

April 4, 2017

### Introduction

The Pollutant Aggregation Suggestions for MS4 Requirements Table (the “Aggregations Table”) has been prepared to help MS4 permittees interpret the MS4 Requirements Table.

The MS4 Requirements Table lists each stream within 5-miles of the permittee urbanized area which is impaired for sediment or nutrients (or their surrogate terms). The MS4 Requirements Table also lists unnamed tributaries to those streams if the cause of the impairment in the unnamed tributary is different than the impairment in the named stream. The result is that some of the listings in the table represent a subset of other listings. Permittees therefore must interpret the MS4 Requirements Table in order to identify the land area for which pollutant loads have to be calculated and where BMPs can be located.

In addition, DEP Pollutant Reduction Plan (PRP) Instructions and TMDL Instructions allow flexibility in the location of BMPs for the upcoming permit term; load reductions need not necessarily be accomplished in each stream and tributary listed in the MS4 Requirements Table. Instead, the instructions promote planning on a larger scale. The MS4 is required to calculate the required pollutant load reduction for its entire Planning Area, but load reductions in some impaired surface waters can be more than what is required, and less than what is required in others, so long as the total reduction is at least the required percentage of the total. It is therefore necessary to interpret the MS4 Requirements Table.

### Using the Aggregation Table

The purpose of the Aggregation Table is to offer a suggestion to developers of PRPs and TMDL Plans which applies the logic discussed above. MS4s are not required to use the suggestion, and DEP solicits feedback from MS4s on the usefulness of Aggregation Table content.

Below is an example of the MS4 Requirements Table. See the MS4 Requirements Table Instructions for an explanation of Table content.

### **Example 1**

### MS4 Requirements Table (Municipal)

Anticipated Obligations for Subsequent NPDES Permit Term

MS4 Name	NPDES ID	Individual Permit Required?	Reason	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)	Other Cause(s) of Impairment
<b>Adams County</b>						
GETTYSBURG BORO		No		Unnamed Tributaries to Rock Creek	Appendix E-Siltation (5)	Water/Flow Variability (4c)
				Stevens Run	Appendix E-Nutrients, Siltation (5)	Unknown Toxicity (5), Water/Flow Variability (4c)
				Rock Creek	Appendix E-Nutrients (5)	
				Chesapeake Bay Nutrients/Sediment	Appendix D-Nutrients, Siltation (4a)	

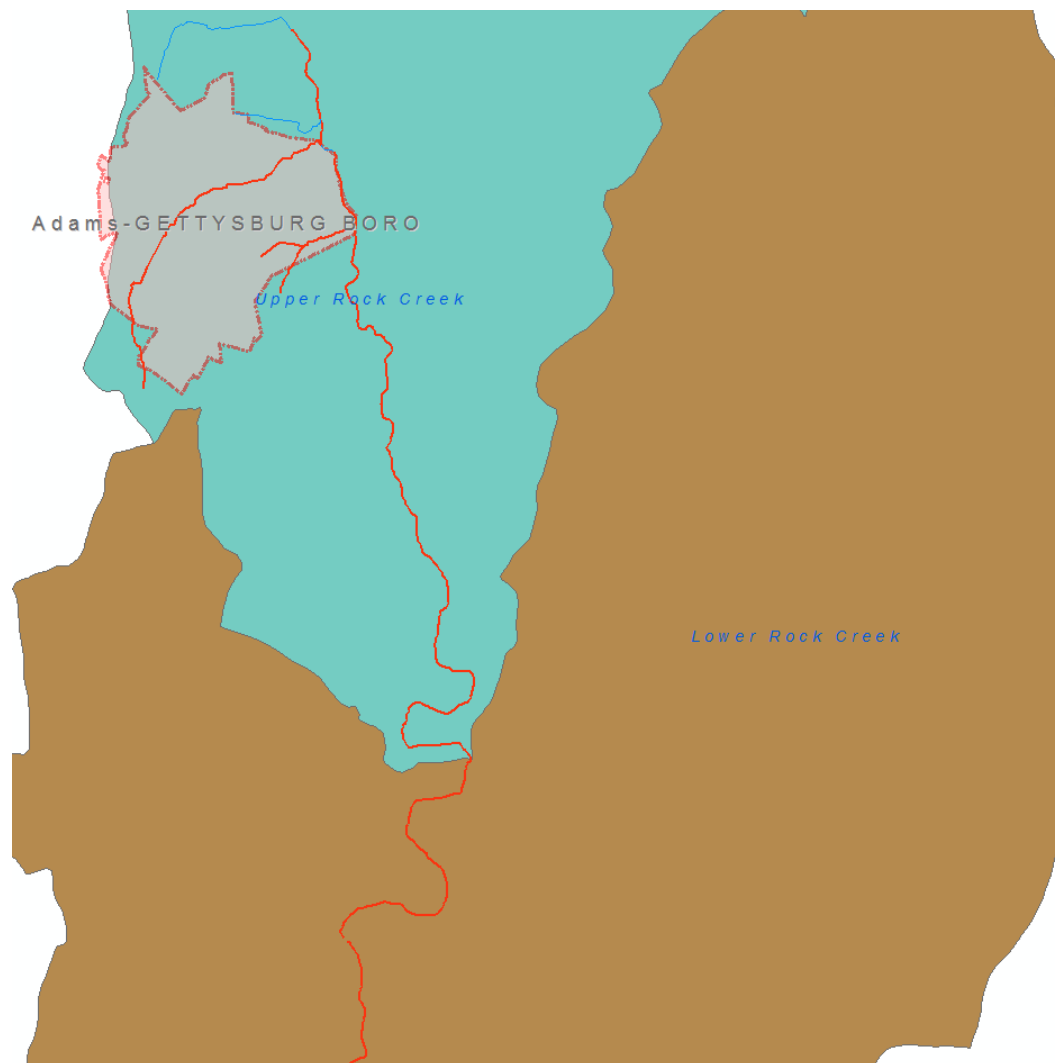
See the Aggregations Table content below and also Figure 1 below. Figure 1 is from the updated web-based GIS application on the DEP website. It shows that Gettysburg drains to a single 12-digit Hydrologic Unit Code (HUC12) watershed, Upper Rock Creek, which is reflected in the Aggregation Table in a single listing. A single PRP could be prepared.

## Pollutant Aggregation Suggestions for MS4 Requirements Table (Municipal)

Anticipated Obligations for Subsequent NPDES Permit Term

MS4 Name	Permit Number	HUC 12 Name	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)
<b>Adams County</b>				
GETTYSBURG BORO		Lower Rock Creek, Upper Rock Creek	Chesapeake Bay Nutrients/Sediment	Appendix D-Siltation/Nutrients

**Figure 1**



**Pollutant Aggregation Suggestions for MS4 Requirements Table Instructions  
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In this example Gettysburg would identify all of the outfalls which drain the Urbanized Area, optionally parse out any which are permitted by the PRP Instructions, delineate the area of regulated outfalls, and calculate the area and pollutant loads from those outfalls. BMPs would be located within the Urbanized Area, preferentially in the drainage area of locally-impaired streams. There would be no requirement to necessarily locate BMPs during the subsequent permit term in all three local impaired waters (Rock Creek, unnamed tributary to Rock Creek and Stevens Run), as long as the total required pollutant reduction is accomplished.

**Example 2**

The following example from the MS4 Requirements Table includes a Pollutant Control Measure (PCMs; Appendix As, Bs or Cs) as well as PRPs (Appendix Ds and Es):

**MS4 Requirements Table (Municipal)**

Anticipated Obligations for Subsequent NPDES Permit Term

MS4 Name	NPDES ID	Individual Permit Required?	Reason	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)	Other Cause(s) of Impairment
<b>Allegheny County</b>						
SOUTH FAYETTE TWP	PAG136282	No		Unnamed Tributaries to Thoms Run	Appendix A-Metals (4a), Appendix E-Suspended Solids (4a), Appendix E-Siltation (5)	TDS, Turbidity (5)
				Unnamed Tributaries to Coal Run	Appendix E-Organic Enrichment/Low D.O. (5)	
				Unnamed Tributaries to Chartiers Creek	Appendix E-Nutrients (5)	
				Thoms Run	Appendix E-Nutrients, Organic Enrichment/Low D.O. (5)	
				Robinson Run	Appendix A-Metals (4a), Appendix E-Suspended Solids (4a), Appendix E-Nutrients, Organic Enrichment/Low D.O., Siltation (5)	Cause Unknown, TDS (5)
				Millers Run	Appendix A-Metals (4a), Appendix E-Suspended Solids (4a), Appendix E-Nutrients (5)	Cause Unknown, TDS, Turbidity (5)
				Fishing Run		TDS, Turbidity (5)
				Dolphin Run		TDS, Turbidity (5)
				Coal Run	Appendix E-Suspended Solids (4a), Appendix E-Nutrients, Siltation (5)	Turbidity (5)
				Chartiers Creek	Appendix A-Metals (4a), Appendix C-PCB (4a), Appendix E-Suspended Solids (4a), Appendix E-Organic Enrichment/Low D.O., Siltation (5)	TDS, Turbidity (5)

See the Aggregations Table below and also Figure 2 below. Figure 2 shows that South Fayette Township drains to four small HUC-12 watersheds. Because those HUC 12 watersheds share a common pollutant with the downstream HUC-10, the Aggregations table suggests a single PRP for the entire Planning Area in South Fayette Township. The first line in the Aggregation Table is for an Appendix C issue which would be addressed in an Appendix C PCM, after permit issuance.

## Pollutant Aggregation Suggestions for MS4 Requirements Table (Municipal)

Anticipated Obligations for Subsequent NPDES Permit Term

MS4 Name	Permit Number	HUC 12 Name	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)
<b>Allegheny County</b>				
SOUTH FAYETTE TWP	PAG136282	Lower Chartiers Creek, Middle Chartiers Creek, Millers Run	Chartiers Creek	Appendix C-PCB
		Lower Chartiers Creek, Middle Chartiers Creek, Millers Run, Robinson Run	Chartiers Creek, Coal Run, Millers Run, Robinson Run, Thoms Run, Unnamed Tributaries to Chartiers Creek, Unnamed Tributaries to Coal Run, Unnamed Tributaries to Thoms Run, Chartiers Creek, Millers Run, Robinson Run, Unnamed Tributaries to Thoms Run	Appendix A-Metals, Appendix E-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids

In this example South Fayette would identify all of the outfalls which drain the Urbanized Area, optionally parse out any which are permitted in the PRP Instructions, delineate the area of regulated outfalls, and calculate the area and pollutant loads from those outfalls. BMPs would be located within the Urbanized Area and preferentially in the drainage area of locally-impaired streams, as long as the total required pollutant reduction is accomplished.

**Figure 2**

