STREAM ID S-CC1	STREAM NAME Cherrystone Creek
LAT 36.894067 LONG -79.445750	DATE 07/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS JH, LM, LS, CL	
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perennial -	<u> </u>	nt <u> Ephem</u>	eral TNW —	RPW <u>▼</u>	NRPW —	
4						
		Estimate Measurements Top of Bank Width: 15.0 ft		Stream ErosionNone ✓ Moderate	Незуу	
					NoneNoderate	rieavy
		Top of Ban	ŭ		Artificial, Modified or Char	nnelized
		LB <u>5.0</u>		<u>tt</u>	Yes✓ No	
CHANNEL FE	ATURES	Water Dep	th: 8.00 in		Dam PresentYes	/ No
		Water Widt	h: 10.0 ft			_
		High Water	Mark: <u>12.0 in</u>		Sinuosity Low _✓	Medium High
		Flow Direc	tion: South		Gradient	
					✓ FlatModerate _	
		Water Due				(10 ft/100 ft)
		Water Pres	senτ r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
		Stream			Riffle 70 % Run 20	%
FLOW		Standin	-		Pool 10 %	
CHARACTER	ISTICS	<u>√</u> Flowing	water		Turbidity	
		Velocity			ClearSlightly	turbidTurbid
		,	Moderate		OpaqueStained	
		Slow			Other	
INOR			MPONENTS	_	RGANIC SUBSTRATE CON	
	(should a	add up to 10	, '	`	does not necessarily add u	·
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder		mm (10")	10	2011.100	plant materials (CPOM)	10
Cobble		m (2.5"-10")	25	Muck-Mud	black, very fine organic	0
Gravel		1 (0.1"-2.5")	30		(FPOM)	0
Sand		nm (gritty)	30			0
Silt		0.06 mm	5	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	0			(2)
		✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
			Field/PastureIndustrial		Grasses Herba	
WATEROUER		Agricultural Residentia		tial	Floodplain Width	
WATERSHED FEATURES		Other:		Wide > 30ft <u>✓</u> Moderate 15-30ft		rate 15-30ft
		Canopy Co	Canopy Cover		Narrow <16ft	
		Partly openPartly sha		aded Wetland Present Yes ✓ No		/ No
		✓ Shaded Open			Wetland ID W-MM8 PEM, W-MM8 PF	
		Indicate th	e dominant type and	d record the d	lominant species present	
AQUATIC VE	GETATION		_	Rooted subme	_	ingFree floating
		Floatin	g algae	Attached algae	e	
		1				
				•	ata collected in 2015. The st	
MA CDOINIVE	TEDDATES		119. The presence of	a stream chan	nnel and OHWM was confirm	ea.
MACROINVER OR OTHER	KIEBKAIES	'				
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES						
NOTES						

Stream ID s-cc1



Photograph Direction North

Date: <u>07/14/2015</u>

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/18/2019

STREAM ID S-CC3	STREAM NAME UNT to Cherrystone Creek
LAT 36.893784 LONG -79.444369	DATE 07/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS JH, LM, LS, CL	
FLOW REGIME Perennial — Intermittent— Ephemeral	WATER TYPE TNW RPW NRPW ✓

Perennial _	_ Intermitte	nt Epheme	eral TNW	RPW —	NRPW 💆	
CHANNEL FE	ATURES	Top of Banl Top of Banl LB 4.0 Water Dept Water Widtl High Water	ft RB <u>5.0</u> h: <u>0.00 in</u>	<u>ft</u>		nelized
FLOW CHARACTER	ISTICS		r, stream bed dry bed moist g water		Proportion of Reach Represe Morphology Types Riffle % Run Pool % Turbidity Clear Slightly Clear Stained Opaque Stained Other	%
INOR		STRATE COI		ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
0.1.1.1	(Siloulu i	add up to 100				i -
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	0	2011.100	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic	0
Gravel	2-64 mm	1 (0.1"-2.5")	30	Widok Wida	(FPOM)	U
Sand	0.06-2r	nm (gritty)	50			0
Silt	0.004-0	0.06 mm	0	Marl	grey, shell fragments	0
Clay	< 0.004	mm (slick)	5			
Predominant Surrounding Lar ✓ Forest Comme — Field/Pasture Industria — Agricultural Residen — Other: Canopy Cover ✓ Partly open Partly sh — Shaded Open			rcial I tial	Indicate the dominant type Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Narrow <16ft Wetland Present Yes Wetland ID	S	
AOUATIONE	DET 4 7:01:		, ,		dominant species present	ing Free fleeting
AQUATIC VE	JETATION	— Rooted — Floating		Rooted subme Attached alga		ingFree floating
Information listed on this form represents the data collected in 2015. The stream was revisite on 11/18/2019. The presence of a stream channel and OHWM was confirmed.						

	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER	
WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	
NOTES	

Stream ID s-cc3



Photograph Direction SE

Date: 07/14/2015

Comments: 2015 stream identification.



Photograph Direction NW

Date: 11/18/2019

STREAM ID S-P5	STREAM NAME UNT to Cherrystone Creek
LAT 36.892718 LONG -79.44052	DATE 06/16/2015
CLIENT MVP	CLIENT MVP
INVESTIGATORS S. Ryan, B. Schrotenboer, L	. Sexton, N. Sovner, K Lew
FLOW REGIME Perennial — Intermittent— Ephemeral	WATER TYPE TNW — RPW — NRPW ✓

CHANNEL FE	ATURES	Top of Ban Top of Ban LB 2.0 Water Dept	ft RB <u>2.0</u> th: <u>0.00 in</u> h: <u>0.0 ft</u> Mark: <u>12.0 in</u>	<u>ft</u>	Stream Erosion None Moderate Artificial, Modified or Char Yes No Dam Present Yes Sinuosity Low Gradient Flat (0.5/100 ft (2 ft/100 ft)	No Medium High	
FLOW CHARACTER	STICS	Stream to Standing Flowing Velocity	r, stream bed dry bed moist g water		Proportion of Reach Representation Morphology Types Riffle % Run Pool % Turbidity ClearSlightly OpaqueStained Other	% turbidTurbid	
INOR		STRATE CO		_	ORGANIC SUBSTRATE COMPONENTS		
	(snould	add up to 100	•	(does not necessarily add up to 100%)			
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder	> 256	mm (10")	15	Detrituo	plant materials (CPOM)	50	
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic	15	
Gravel	2-64 mm	า (0.1"-2.5")	15	Widok Wida	(FPOM)	15	
Sand	0.06-2r	nm (gritty)	25				
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	20				
Predominant Surrounding Landuse ✓ Forest Commercial Field/Pasture Industrial ✓ Agricultural Residential Other: Canopy Cover — Partly open Partly shaded ✓ Shaded Open		cial tial	Indicate the dominant type Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Mode Narrow <16ft Wetland Present Yes Wetland ID	s ceous rate 15-30ft			
AQUATIC VE	GETATION		emergent		dominant species present ergent Rooted float	tingFree floating	

	Located adjacent to agricultural field but entirely within the forested area. Feature not a relocated tributary or excavated in a tributary. (2015)
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/17/2019. The presence of a stream channel and OHWM was confirmed.

Stream ID S-P5



Photograph Direction East

Date: <u>06/16/2015</u>

Comments: 2015 stream identification.



Photograph Direction East

Date: 11/17/2019

STREAM ID S-IJ35-EPH		STREAM NA	STREAM NAME UNT to Pole Bridge Branch			
CLIENT MVP		PROJECT N	PROJECT NAME MVP			
LAT 36.891446 LONG -79.433782			2 DATE 06/07/	/2016	COUNTY Pittsylvania	
INVESTIGATORS E. Foster, S. Therkildson, C.			son, C. Sorden			
WATER TYPE TNW RPW NRPW			FLOW REG Perennial	FLOW REGIME Perennial Intermittent Ephemeral		
		Estimate Mea	asurements	Ĭ	Sinuosity _/ Low	Medium High
		Top of Bank V Top of Bank H	Vidth: 4.5 ft leight:		Gradient Flat ✓ Mo (2 ft/	derate Severe
			RB 1.0	π	Stream Erosion ✓ NoneModerate	Незуу
		Water Depth:			Artificial, Modified or Chann	
CHANNEL FE	ATURES	Water Width:_			Yes ✓ No	
			Water Mark (Width):		_	
			Water Mark (Height)	: <u>6.0</u> in	Within Roadside Ditch Yes✓No	1
		Flow Direction	n: Northwest	-	Culvert PresentYes	
					Culvert Size:	
1		Water Brees	.4		Culvert Size:in Proportion of Reach Repres	antad by Straam
FLOW	Water Present No water, stream Stream bed moistStanding water		tream bed dry I moist vater		Morphology Types (Only enter Riffle 25 % Run 60 Pool 15 %	er if water present)
CHARACTERISTICS Velocity Fast Mode		_ Moderate		Turbidity Clear Slightly turbid Turbid Other		
		✓ Slow				
INOD	CANICCI	IDCTDATE COL	MDONENTS		DC ANIC CURCTRATE COM	IDONENTS
-	_	UBSTRATE COI	0%) 100	(DRGANIC SUBSTRATE COM does not necessarily add up	p to 100%)
Substrate	(shoul		-	-	does not necessarily add up	-
_	(shoul	ld add up to 100	% Composition in	Substrate Type	Characteristic	% Composition in
Substrate Type	(shoul	ld add up to 100	% Composition in	Substrate	does not necessarily add up	% Composition in
Substrate Type Bedrock	(shoul	ld add up to 100 meter	% Composition in	Substrate Type Detritus	Characteristic sticks, wood, coarse	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder	Shoul Dian > 25 64-256	neter 66 mm (10")	% Composition in	Substrate Type	Characteristic sticks, wood, coarse plant materials (CPOM)	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble	Shoul Dial	meter 56 mm (10") 5 mm (2.5"-10")	% Composition in	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel	> 25 64-256 2-64 r	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	% Composition in Sampling Reach	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shoul Dial	meter 56 mm (10") 5 mm (2.5"-10") 5 mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick)	% Composition in Sampling Reach 60 30	Substrate Type Detritus Muck-Mud Marl	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dial	meter 56 mm (10") 5 mm (2.5"-10") 5 mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick)	% Composition in Sampling Reach 60 30 10 Surrounding Landu — Commerciaure — Industrial al — Residential — Other:	Substrate Type Detritus Muck-Mud Marl	Characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shoul Dial	meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") 7 mm (gritty) 7 mm (slick) Predominant 7 Forest 7 Field/Past 7 Agricultura 8 ROW Canopy Cove 9 Open	% Composition in Sampling Reach 60 30 10 Surrounding Landu — Commercia — Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl	Characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	y to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Diar	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant ✓ Forest ✓ Field/Past ✓ Agricultura — ROW Canopy Cove ✓ Open Shaded	% Composition in Sampling Reach 60 30 10 Surrounding Landu — Commercia — Industrial — Residential — Other: Partly shad	Substrate Type Detritus Muck-Mud Marl	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Narrow <15ft	y to 100%) % Composition in Sampling Area 20 ate 15-30ft
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dial	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant ✓ Forest ✓ Field/Past ✓ Agricultura — ROW Canopy Cove ✓ Open — Shaded TEBRATES/OT er rocks in strea	% Composition in Sampling Reach 60 30 10 Surrounding Landu — Commercia — Industrial al — Residential — Other: Partly shad HER WILDLIFE OBS	Substrate Type Detritus Muck-Mud Marl Ise all	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Narrow <15ft OTHER NOTES AND OBSER	y to 100%) % Composition in Sampling Area 20 ate 15-30ft



Photograph Direction NW

STREAM ID S-Q4	STREAM NAME UNT to Pole Bridge Branch
LAT 36.885979 LONG -79.430010	DATE 06/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Stott, A.Grech, D.McCullo	ough
FLOW REGIME Perennial ✓ Intermittent— Ephemeral—	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai 🗅	<u> </u>	nt Ephem	eral TNW —	RPW <u>▼</u>	NRPW —	
4	•					
				Stream Erosion ✓ None Moderate	Heavy	
		Top of Bank Height:		VIVOICIVIOGCIALE	ricavy	
			=		Artificial, Modified or Char	nnelized
		LB <u>6.0</u>		<u>in</u>	Yes✓ No	
CHANNEL FE	ATURES	-	th: 2.00 in		Dam PresentYes _	∕ No
		Water Widt				
		High Water	Mark: <u>12.0 in</u>		Sinuosity Low	Medium High
		Flow Direct	tion: East		Gradient	
					✓ FlatModerate (2 ft/100 ft)	Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	
			r, stream bed dry		Morphology Types	ssented by Stream
		Stream I			Riffle 75 % Run	%
FLOW		— Standing	-		Pool 25 %	
CHARACTER	ISTICS	✓ Flowing	water		Turbidity	
		Velocity			ClearSlightly	
			✓ Moderate		OpaqueStained	
		Slow		1	Other	
INOR		STRATE CO add up to 10	MPONENTS 0%)		RGANIC SUBSTRATE COM does not necessarily add u	
Substrate	Diame		% Composition in Sampling Reach	,	Characteristic	% Composition in Sampling Area
Type Bedrock			Sampling Reach	Type	atials was a server	Sampling Area
Boulder	> 256	mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)	30
Cobble	64-256 m	m (2.5"-10")	5	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	5	WIGGK-WIGG	(FPOM)	
Sand	0.06-2n	nm (gritty)	75			
Silt	0.004-0	0.06 mm	15	Marl	grey, shell fragments	
Clay	< 0.004 i	mm (slick)				
			ant Surrounding Lan		Indicate the dominant type	
		✓ Forest Field/Pa	Commer asture Industria		✓ Trees — Shrub Grasses — Herba	
		AgriculturalResident		tial		
WATERSHED FEATURES		Other:		Floodplain Width Wide > 30ft <u>√</u> Moderate 15-30ft		rate 15-30ft
LATORES		Canany C			Narrow <16ft	rate 10-00it
		Canopy Cover Partly open Partly sh		aded		
		✓ Shaded Open			Wetland Present <u>√</u> Yes Wetland ID w-Q2	No
		Indicate th	e dominant type and	d record the d	Iominant species present	
				Rooted subme		tingFree floating
		Floating algae Attached algae				
					ata collected in 2015. The st	
			019. The presence of	a stream chan	nnel and OHWM was confirm	ied.
MACROINVER OR OTHER	RTEBRATES					
WILDLIFE OBSERVED/C	THEP					
OBSERVATIO						
NOTES						

Stream ID s-Q4



Photograph Direction West

Date: 06/14/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 11/17/2019

STREAM ID S-Q3	STREAM NAME Pole Bridge Branch
LAT 36.884675 LONG -79.427965	DATE 06/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Stott, A.Grech, D.McCullo	ough
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

i erennai =	intermitte	пс— приспи	erar IIIVV —	1XI VV —		
		Estimate N	Measurements		Stream Erosion	
	Top of Bank Width: 25.0 ft				✓ NoneModerate	Heavy
		Top of Bank Height:				
		LB_3.0	•	ft	Artificial, Modified or Char Yes ✓ No	nnelized
			th: 11.00 in	<u>-</u>	163110	
CHANNEL FE	ATURES	Water Widt			Dam PresentYes _	<u>∕</u> No
			Mark: 36.0 in		Sinuosity Low	Medium High
		J	tion: South		Considerat	
		1 1011 21100			Gradient <u>✓</u> Flat Moderate _	Severe
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
			ped moist		Riffle 75 % Run 10	%
FLOW		Standing	g water		Pool 15 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			ClearSlightly	turbid <u></u> Turbid
		<u>✓</u> Fast	Moderate		OpaqueStained	
		Slow		i	Other	
INOR		STRATE CO add up to 10		_	RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	5	Detitius	plant materials (CPOM)	10
Cobble		m (2.5"-10")	10	Muck-Mud	black, very fine organic	
Gravel		1 (0.1"-2.5")	45		(FPOM)	
Sand		nm (gritty)	40			
Silt		0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	nt Surrounding Lar	duco	Indicate the dominant type	(Chaok ana)
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub	
		Field/P				iceous
WATERSHED)	Agricultural Residential		tial	Floodplain Width	
FEATURES		Other:			Wide > 30ft <u>✓</u> Moderate 15-30ft	
Car		Canopy Cover		Narrow <16ft		
		Partly openPartly shadedOpen			Wetland Present <u>v</u> Yes Wetland ID w-Q2	No
	Indicate the dominant type and record the dominant species present					
AQUATIC VEGETATIONRooted emergent Floating algae			Rooted subme	_	tingFree floating	
		Floating	g algae	Attached algae	e 	
					ata collected in 2015. The st nnel and OHWM was confirm	
MACROINVE	RTEBRATES		ore. The presence of	a strouin onar	ino and Orivini was collilli	
OR OTHER WILDLIFE						
OBSERVED/C						
OBSERVATIO NOTES	UNA GNU					
ĺ						

Stream ID s-Q3



Photograph Direction South

Date: <u>06/14/2015</u>

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/18/2019

STREAM ID S-Q2	STREAM NAME UNT to Pole Bridge Branch
LAT 36.884244 LONG -79.427015	DATE 06/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Stott, A.Grech, D.McCullo	ough
FLOW REGIME Perennial — Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perennial -	<u> </u>	nt <u> Ephem</u>	eral TNW —	RPW 🚣	NRPW	
		Estimata I	Accouraments		Streem Freeien	
	Estimate Measurements Top of Bank Width: 7.0 ft				Stream Erosion ✓ None Moderate	Heavy
		Top of Bank Height:				
		LB 1.0	=	ft	Artificial, Modified or Char Yes ✓ No	inelized
			th: 6.00 in	<u></u>	res <u></u>	
CHANNEL FE	ATURES	·	th: 3.0 ft		Dam PresentYes _	<u>∠</u> No
			Mark: 12.0 in		Sinuosity Low	Medium 🗸 High
		Ū				Wediam <u>•</u> riigii
		Flow Direc	tion: Northwest		Gradient ✓ FlatModerate	Severe
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types Riffle 50 % Run 30	%
		Stream	bed moist		Pool 20 %	/0
FLOW CHARACTER	ISTICS	✓ Flowing	-		20 //	
CHARACTER	131103				Turbidity Clear ✓ Slightly	turbidTurbid
		Velocity Fast	✓ Moderate		OpaqueStained	
		Slow	Woderate		Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	/PONENTS
		add up to 10		(0	does not necessarily add u	p to 100%)
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")	5	Detritus	plant materials (CPOM)	30
Cobble	64-256 m	m (2.5"-10")	5	Muck-Mud	black, very fine organic	
Gravel		(0.1"-2.5")	5		(FPOM)	
Sand		nm (gritty)	40			
Silt		0.06 mm	45	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	nt Curreunding Lar	duas	Indicate the deminent type	(0) (
		✓ Forest	ant Surrounding Lar Commer		Indicate the dominant type ✓ Trees Shrub	
		Field/Pasture Industrial			Grasses Herba	iceous
WATERSHED		Agricultural Residenti			Floodplain Width	
FEATURES		Other:			Wide > 30ft <u>✓</u> Moderate 15-30ft	
		Canopy Co	over	Narrow <16ft		
		<u>✓</u> Partly o	penPartly sh	aded	Wetland Present Yes	✓ No
					Wetland ID	<u>-</u>
					lominant species present	
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae				
		1 10atii1	y alyae	Allacrieu algai	<u> </u>	
		1				
					ata collected in 2015. The st nnel and OHWM was confirm	
MACROINVE	RTEBRATES					
OR OTHER WILDLIFE						
OBSERVED/C						
OBSERVATION NOTES	UNA GNU					

Stream ID s-Q2



Photograph Direction NW

Date: 06/14/2015

Comments: 2015 stream identification.



Photograph Direction SE

Date: 11/18/2019

STREAM ID S-B6	STREAM NAME UNT to Pole Bridge Branch
LAT 36.879288 LONG -79.420188	DATE 04/06/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS C. Ansari, J. Rodriguez, M.	Whitten
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW_

Perennial	_ Intermitte	ttent Ephemeral		RPW	NRPW 💆		
CHANNEL FEATURES Estimate Measurements Top of Bank Width: 10.0 ft Top of Bank Height:			<u>ft</u>	Stream Erosion None Moderate Artificial, Modified or Char Yes No Dam Present Yes Sinuosity Low Gradient Flat 0.5/100 ft C ft/100 ft Proportion of Reach Represent	No Medium High Severe (10 ft/100 ft)		
No water, stream bed dry Stream bed moist Standing water Flowing water Flowing water Velocity Fast Moderate Slow				Morphology Types Riffle 15 % Run 55 Pool 30 % Turbidity Clear Slightly Opaque StainedOther	turbidTurbid		
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			NTS	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate	,			mposition in	Substrate		% Composition in
Туре	Diame	ter	Samp	ling Reach	Туре	Characteristic	Sampling Area
Bedrock	. 050	(4011)	0		Detritus	sticks, wood, coarse plant materials (CPOM)	00
Boulder Cobble		mm (10")	10				90
Gravel		m (2.5"-10")	20		Muck-Mud	black, very fine organic (FPOM)	
Sand		nm (gritty)	25			(
Silt		0.06 mm	25 15		Marl	grey, shell fragments	
Clay		mm (slick)	15			g.oy, onon nagmonic	
WATERSHED FEATURES Predominan ✓ Forest — Field/Pas — Agricultur — Other: Canopy Cov ✓ Partly op _ Shaded			asture cural cover	cunding Lan Commer Industrial Resident Partly sha	cial I tial	Floodplain Width	os aceous erate 15-30ft
AQUATIC VEGETATION Indicate the dominant type a Rooted emergent Floating algae			nt	d record the Rooted subm Attached alga	dominant species present ergent Rooted floar	tingFree floating	
		Information	lieted on	this form ro	nracanta tha	data collected in 2015. The st	ream was revisited
MACROINVER	RTEBRATES	on 11/18/20			•	nnel and OHWM was confirm	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER	
WILDLIFE OBSERVED/OTHER OBSERVATIONS AND	
NOTES	



Photograph Direction South

Date: 04/06/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/18/2019

STREAM ID S-b8	STREAM NAME UNT to Pole Bridge Branch
LAT 36.87796 LONG -79.417969	DATE 04/06/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS C. Ansari, J. Rodriguez, M.	Whitten
FLOW REGIME Perennial Intermittent ✓ Ephemeral	WATER TYPE TNW RPW ✓ NRPW

Estimate Measurements Top of Bank Width: 4.0 ft Top of Bank Width: 4.0 ft Top of Bank Width: 4.0 ft Top of Bank Height: LB 4.0 ft RB 3.0 ft Yes None Moderate Heavy Moderate Yes No Dam Present Yes No Dam Present Yes No Moderate Heavy Moderate Heavy Moderate Heavy Moderate Severe Gradient Flat Moderate Steam bed dry Stream bed dry Turbididy Yes Flood Gradient Flat Moderate Flood Turbididy Yes Flood Gradient Flood Turbididy Yes Flood Gradient Turbididy Yes Gradient Yes Yes Gradient Yes Yes Gradient Yes Yes Gradient Yes Yes Turbididy Yes Gravet Yes Yes Gradient Yes Yes Gradient Yes	Perennial	_ Intermitte	nt 🚣 Ephem	eral TNW	RPW 💆	NRPW	
Top of Bank Height: LB 4.0 ft RB 3.0 ft Yes No Water Poeth: 4.00 in Water Width: 3.0 ft High Water Mark: 12.0 in Flow Direction: Southwest Flow CHARACTERISTICS Water Present No water, stream bed dry Stream bed moist Substrate Stream bed moist Stream bed moist Stream bed moist Stream bed moist Substrate Stream bed mo							
Top of Bank Height: LB 4.0 ft RB 3.0 ft Vater Depth: 4.000 in Water Depth: 4.000 in Water Depth: 4.000 in Water Width: 3.0 ft High Water Mark: 12.0 in Flow Direction: Southwest Gardient (0.5/100 ft Vater Depth: 4.000 ft Vater Mark: 12.0 in Flow Direction: Southwest Gardient (0.5/100 ft Vater Mark: 12.0 in Flow Direction: Southwest Gardient (0.5/100 ft Vater Mark: 12.0 in Flow Direction: Southwest Gardient (0.5/100 ft Vater Moderate (0.5/100 ft Vate			Estimate N				
CHANNEL FEATURES LB 4.0 ft RB 3.0 ft Yes \(\simeq \) No No No No No No No No			Top of Ban	k Width: <u>4.0 ft</u>		None Moderate	Heavy
CHANNEL FEATURES			Top of Ban	k Height:		Artificial Modified or Char	nelized
Water Depth: 4.00 in Water Width: 3.0 ft High Water Mark: 12.0 in Flow Direction: Southwest Gradient Flow Direction: Southwest Gradient G			LB 4.0	ft RB 3.0	ft	•	illelizeu
Water Width: 3.0 ft				_			
High Water Mark: 12.0 in Flow Direction: Southwest	CHANNEL FE	ATURES	· ·			Dam PresentYes _	<u>∠</u> No
FLOW Direction: Southwest						Sinuosity Low 🗸	Medium High
Flat						<u> </u>	
Water Present			Flow Direct	tion: Southwest			
Water Present							
No water, stream bed dry Stream bed moist Standing water Pool 5 % Run 10 %			Water Pres	sent		. ,	,
Standing water						Morphology Types	-
## Flowing water Velocity			Stream l	ped moist			%
Velocity	FLOW			•		Pool 5 %	
Velocity		ISTICS	<u>✓</u> Flowing	water		Turbidity	
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) Substrate Type Bedrock Boulder Sombling Reach Cobble 64-256 mm (10") Sand Cobble 64-256 mm (2.5"-10") Sand 0.06-2mm (gritty) Silt 0.004-0.06 mm Silt Coher Features Predominant Surrounding Landuse Field/Pasture Agricultural Other: Canopy Cover Partly open Shaded Shaded Dindicate the dominant type and record the dominant species present Rooted submergent Rooted submergent Rooted submergent Rooted submergent Rooted submergent Rooted floating Reserves Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed.			Velocity				turbidTurbid
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) Substrate Type Diameter Sampling Reach Bedrock Boulder Poble Bedrock Boulder B				Moderate			
Substrate Diameter % Composition in Sampling Reach Type Characteristic % Composition in Sampling Area			✓ Slow			Other	
Substrate Type Diameter Sampling Reach Substrate Type Characteristic Sampling Area	INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS
Bedrock		(should	add up to 10	0%)	(does not necessarily add u	p to 100%)
Boulder > 256 mm (10") 25 Detritus plant materials (CPOM) 85 Cobble 64-256 mm (2.5"-10") 5 Muck-Mud black, very fine organic (FPOM) Sand 0.06-2mm (gritty) 15 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Forest Canopy Cover Partly open Shaded Open Wetland ID Canopy Cover Partly open Shaded Open Wetland ID AQUATIC VEGETATION MACROINVERTEBRATES OR OTHER WILDLIFE MACROINVERTEBRATES OR OTHER WILDLIFE MACROINVERTEBRATES OR OTHER WILDLIFE MACROINVERTEBRATES OR OTHER WILDLIFE Observe Description (10") 25 Detritus plant materials (CPOM) 85 Muck-Mud black, very fine organic (FPOM) black, ver	_	Diame	eter			Characteristic	
Boulder > 256 mm (10") 25	Bedrock			0	Dotritus	sticks, wood, coarse	
Gravel 2-64 mm (0.1"-2.5") 50 Muck-Mud (FPOM)	Boulder	> 256	mm (10")	25	Detritus	plant materials (CPOM)	85
Sand 0.06-2mm (grity) 15 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse ✓ Forest Commercial Trees Shrubs — Field/Pasture Industrial Grasses Herbaceous — Agricultural Residential — Other: Vartly open Partly shaded — Shaded Open Partly shaded — Shaded Open Rooted submergent Rooted floating Free floating — Rooted emergent Rooted submergent Rooted floating Free floating — Floating algae Attached algae MACROINVERTEBRATES OR OTHER WILDLIFE ORSERVED/OTHER	Cobble	64-256 m	m (2.5"-10")	5	Muck Mud	black, very fine organic	
Silt 0.004-0.06 mm 5	Gravel	2-64 mm	า (0.1"-2.5")	50	IVIUCK-IVIUU	(FPOM)	
Clay < 0.004 mm (slick) Predominant Surrounding Landuse	Sand	0.06-2r	nm (gritty)	15			
WATERSHED FEATURES Predominant Surrounding Landuse	Silt	0.004-0	0.06 mm	5	Marl	grey, shell fragments	
WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES Residential Other: Agricultural Residential Other: Partly shaded Shaded Open Wetland Present Wetland Present Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Floating algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. WACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	Clay	< 0.004	mm (slick)				
WATERSHED FEATURES Field/Pasture							
WATERSHED FEATURES Agricultural Residential Width Wide > 30ft Moderate 15-30ft Canopy Cover Narrow <16ft Partly open Partly shaded Open Wetland Present Yes No Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER							
WATERSHED FEATURES Other: Canopy Cover Partly open Partly shaded Shaded Open Metland Present Yes ✓ No Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER						GrassesHerba	ceous
Canopy Cover Partly open Shaded Open Wetland Present Yes No Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. Wild > 30it	WATERSHED	ı		Resider	ıllai	Wide > 30ft Moderate 15-30ft	
AQUATIC VEGETATION Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	FEATURES						
AQUATIC VEGETATION Indicate the dominant type and record the dominant species present Rooted emergent Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	Canopy Cover		over		Narrow <16ft		
AQUATIC VEGETATION Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	<u>✓</u> Partly openPartly		. —	haded	Wetland Present Yes	✓ No	
AQUATIC VEGETATIONRooted emergentRooted submergentRooted floatingFree floatingFree floatingRooted floatingFree floating	ShadedOpen						
Floating algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER							
Information listed on this form represents the data collected in 2015. The stream was revisited on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	· · · · · · · · · · · · · · · · · · ·			_	<u> </u>	ingFree floating	
on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER			rioating	y aiyae	_Attached alga		
on 11/18/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER			1				
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER							
OR OTHER WILDLIFE OBSERVED/OTHER	MACDOWN	TEDD 4 TEC		וופ. וne presence o	ı a stream char	inei and Ohvvivi was confirm	eu.
OBSERVED/OTHER	OR OTHER	KIEBKAIES	'				
		THER					
NOTES	OBSERVATION						

Stream ID S-b8



Photograph Direction NE

Date: <u>04/06/2015</u>

Comments: 2015 stream identification.



Photograph Direction NE

Date: 11/18/2019

STREAM ID S-B9	STREAM NAME UNT to Pole Bridge Branch
LAT 36.877273 LONG -79.4166	DATE 04/06/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS C. Ansari, J. Rodriguez, M.	Whitten
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW

i eleliliai.	_	III.— Epileili		1X1 VV —	INICI VV	
		Estimato N	/leasurements		Stream Erosion	
Top of I Top of I LB <u>2.0</u>		Top of Bank Width: 7.0 ft		None Moderate	Heavy	
		Top of Bank Height:				·
		•	· ·	ft	Artificial, Modified or Chan	nelized
				" .	Yes _ <u>✓</u> No	
CHANNEL FE	ATURES	·	th: <u>6.00 in</u>		Dam PresentYesv	✓ No
		Water Widt	th: <u>5.0 ft</u>			_
		High Water	r Mark: <u>12.0 in</u>		Sinuosity Low	Medium High
		Flow Direct	tion: West		Gradient	
					—	Severe
		14/-4 D	4		, , ,	(10 ft/100 ft)
		Water Pres	sent er, stream bed dry		Proportion of Reach Repre Morphology Types	sented by Stream
			bed moist		Riffle 40 % Run 40	%
		— Standin			Pool 20 %	
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	water		To code i el ido e	
		Volocity			Turbidity <u>✓</u> ClearSlightly t	turbidTurbid
		Velocity Fast	✓ Moderate		OpaqueStained	
		Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	OI	RGANIC SUBSTRATE COM	IPONENTS
	(should a	dd up to 100%)		(0	loes not necessarily add up	p to 100%)
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	30	Delilius	plant materials (CPOM)	20
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	1 (0.1"-2.5")	25	Wack-Waa	(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	0.06 mm	5	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)				
			ant Surrounding Lar		Indicate the dominant type	
		Forest	Commer		✓ Trees Shrubs Grasses Herba	
		Field/Pasture Industrial Agricultural Residenti				ceous
WATERSHED		Other:			Floodplain Width	
FEATURES				Wide > 30ft Moderate 15-30th Narrow <16ft		ate 15-30ft
		Partly open Partly shaded Shaded Open			Wetland Present _v_Yes	No
_			Wetland ID W-F5			
				lominant species present	ing Froe floating	
AQUATIC VEGETATION			Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae			
			<u></u>			
		latan "	Parada a C. C.		-1	
					ata collected in 2015. The str inel and OHWM was confirm	
MACROINVER	RTERRATES		o ro. The procented of	a on oam onan	morana ornami wao commi	ou.
OR OTHER						
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES	NS AND					
ĺ						

Stream ID S-B9



Photograph Direction East

Date: 04/06/2015

Comments: 2015 stream identification.



Photograph Direction East

Date: 11/18/2019

STREAM ID S-DD4-Braid-1		STREAM NA	STREAM NAME UNT to Mill Creek				
CLIENT MV	CLIENT MVP			PROJECT NAME MVP			
LAT 36.871651 LONG -79.404061			1 DATE 04/09/	2018	COUNTY Pittsylvania		
INVESTIGATO	ORS CA, I	KP					
TNW		NRPW	FLOW REG Perennial	IME Intermitte	ent 🔽 Ephemeral 🗌		
CHANNEL FE	ATURES	Top of Bank H LB <u>2.0</u> ft Water Depth: Water Width: Ordinary High	/idth:6.0ft leight: RB2.0		Gradient Flat Mo (0.5/100 ft) (2 ft/ (0.5/100 ft) (2 ft/ (0.5/100 ft)) (nelized	
Water Present No water, streamStream bed moisStanding waterVelocityFastVModSlow			tream bed dry moist ater	I 	Proportion of Reach Repres Morphology Types (Only ente Riffle 50 % Run 50 Pool % Furbidity ClearSlightly to _Other	er if water present) %	
INORGANIC SUBSTRATE COMPON							
INOR				_	RGANIC SUBSTRATE COM		
	(shou	ld add up to 100	1%) 100	(0	RGANIC SUBSTRATE COM does not necessarily add u	p to 100%)	
Substrate Type	(shou			_		p to 100%)	
Substrate Type Bedrock	(shoul	d add up to 100 meter	%) 100 % Composition in	Substrate Type	Characteristic sticks, wood, coarse	p to 100%) % Composition in	
Substrate Type Bedrock Boulder	(shoul	d add up to 100 meter 56 mm (10")	%) 100 % Composition in	Substrate	Characteristic sticks, wood, coarse plant materials (CPOM)	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble	Shoul Dia > 28 64-256	meter 56 mm (10") 5 mm (2.5"-10")	%) 100 % Composition in	Substrate Type	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	y to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel	Shoul Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	%) 100 % Composition in Sampling Reach	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM)	y to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand	Should Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty)	%) 100 % Composition in Sampling Reach	Substrate Type Detritus Muck-Mud	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM)	p to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel	Shoul Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	%) 100 % Composition in Sampling Reach	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	y to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dia	d add up to 100 meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 04 mm (slick)	% Composition in Sampling Reach 30 10 60 Surrounding Landu — Commercia — Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl see F	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM)	y to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant Forest Field/Pastu Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 30 10 60 Surrounding Landu Commercia Industrial Residential Other: Partly shade	Substrate Type Detritus Muck-Mud Marl Ise F	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	y to 100%) % Composition in Sampling Area 70	



Photograph Direction NW

STREAM ID S-DD4	STREAM NAME UNT to Mill Creek
LAT 36.871011 LONG 79.403314	DATE 07/28/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS AL, SK, LS	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

		Estimate Measurements Top of Bank Width: 10.0 ft			Stream Erosion None Moderate	Heavv	
		Top of Bank Height:				•	
		, ,		ft	Artificial, Modified or Chan	nelized	
				<u></u>	Yes <u></u> ✓No		
CHANNEL FE	ATURES	i i	th: 4.00 in		Dam PresentYes	✓ No	
		Water Widt				_	
		Ŭ	Mark: <u>10.0 in</u>		Sinuosity Low	iviedium High	
		Flow Direct	tion: S, SE		Gradient	_	
					<u>✓</u> Flat Moderate (0.5/100 ft) (2 ft/100 ft)	Severe (10 ft/100 ft)	
		Water Pres			Proportion of Reach Represented by Stream		
			r, stream bed dry oed moist		Morphology Types Riffle 10 % Run 80 %		
		Standing			Pool 10 %	,,	
FLOW CHARACTER	ISTICS	Flowing	•				
					Turbidity ✓ ClearSlightly turbidTurbid		
		Velocity Fast	Moderate		OpaqueStained Other		
		✓ Slow					
INOR	GANIC SUB	BSTRATE COMPONENTS		0	ORGANIC SUBSTRATE COMPONENTS		
	(should	add up to 10	0%)	((does not necessarily add up	o to 100%)	
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder	> 256	mm (10")		Delilius	plant materials (CPOM)	10	
Cobble	64-256 m	ım (2.5"-10")	10	Muck-Mud	black, very fine organic		
Gravel	2-64 mm	า (0.1"-2.5")	10	WIGOR WIGG	(FPOM)		
Sand	0.06-2r	nm (gritty)	60	Marl	grey, shell fragments		
Silt	0.004-	0.06 mm	10				
Clay	< 0.004	mm (slick)	10				
		Predominant Surrounding Landu ✓ Forest Commercia Field/Pasture Industrial			Indicate the dominant type ✓ Trees Shrub:		
					Grasses Herba		
		Agricult			al —		
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Moder	rate 15-30ft	
		Canopy Cover Partly open Shaded Open			✓ Narrow <16ft		
				aded	ded Wetland PresentYes Wetland ID Wetland ID		
		Indicate the dominant type and record the dominant species present					
AQUATIC VEGETATION		1 — —		Rooted subm	_	ingFree floating	
		Floating algaeAttached algae					
		I lafa was a C	listed on this face or		lata callegated in 2015		
Information listed on this form represents the data collected in 2015. The stream was revisited and extended through the updated survey area on 4/10/2018. At this							

	Information listed on this form represents the data collected in 2015. The stream was revisited and extended through the updated survey area on 4/10/2018. At this time the presence of an OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	

Photograph Page

Stream ID <u>s-DD4</u> Date <u>07/28/2015</u>



Photograph Number __1___

Photograph Direction East

Comments: 2015 survey facing downstream.



Photograph Number 2

Photograph Direction East

Comments: 2018 survey facing downstream.

STREAM ID S-KL27			STREAM NA	STREAM NAME UNT to Mill Creek			
CLIENT MVP			PROJECT N	PROJECT NAME MVP			
LAT 36.86664 LONG -79.400418				DATE 07/12/2016 COUNTY Pittsylvania			
INVESTIGATORS J. Cook, A. Mengel, K. Pulver							
WATER TYPE TNW RPW NRPW				FLOW REGIME			
CHANNEL FEATURES		Estimate Measurements Top of Bank Width:2.0 ft Top of Bank Height: LB2.0 ft		<u>1.0_</u> ft	Sinuosity _ LowMediumHigh Gradient _ FlatModerateSevere (0.5/100 ft)		
FLOW CHARACTERISTICS		Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle % Run % Pool % Turbidity Clear Slightly turbid Turbid Other		
INORGANIC SUBSTRATE COMPON (should add up to 100%)		-					
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	e Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder		56 mm (10")		Boundo	plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Muc	black, very fine organic		
Gravel		nm (0.1"-2.5")			(FPOM)		
Sand		-2mm (gritty)	50				
Silt		4-0.06 mm	50	Marl	grey, shell fragments		
Clay < 0.004 mm (slick) Predominant Sur Forest Field/Pasture ✓ Agricultural ROW Canopy Cover ✓ Open Shaded		Residential Other:	al	Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft			
MAGROUNVERTERRATEGOTHER WILL RUSE ORGERVER OR OTHER MOTES AND ORGERVER							
MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Field erosional feature that runs off site into woods. May have connection to other water features. Physiology of the stream is non parabolic and shows development of runs, riffles, and pools that are clearly evident even without water present.							



Photograph Direction $\underline{\text{NE}}$

STREAM ID S-C1	STREAM NAME Mill Creek				
LAT 36.863473 LONG-79.397969	DATE03/31/2015				
PROJECT NAME MVP	CLIENT MVP				
INVESTIGATORS L. Harloe, K. Lamontagne, A. Flake, G. Stevens, A. Rodrian, S. Kelly					
FLOW REGIME	WATER TYPE				
Perennial Intermittent Perennial Intermittent Intermittent	TNW ✔ RPW NRPW				

CHANNEL FEATURES		Estimate Measurements Top of Bank Width: 6 ft Top of Bank Height: LB 1 ft RB 2 ft Water Depth: 2.00 in Water Width: 3 ft High Water Mark: 3 ft		Stream Erosion None Moderate Artificial, Modified or Char Yes No Dam Present Yes Sinuosity Low Gradient Flat Moderate (0.5/100 ft (2 ft/100 ft)	nelized No Medium High Severe	
FLOW CHARACTERISTICS		Water Present No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Proportion of Reach Represented by Stream Morphology Types Riffle % Run 85 % Pool 15 % Turbidity Clear Slightly turbid Turbid Opaque Stained Other	
INOR				DRGANIC SUBSTRATE COMPONENTS does not necessarily add up to 100%)		
Substrate Type	Diame	•	% Composition in Sampling Reach	Substrate Type	1	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	7.5
Boulder Cobble		mm (10") ım (2.5"-10")	45		plant materials (CPOM)	75
Gravel		n (0.1"-2.5")	15 25	Muck-Mud	black, very fine organic (FPOM)	
Sand		nm (gritty)	50		, ,	
Silt		0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)				
WATERSHED FEATURES		Predominant Surrounding Landuse ✓ Forest Commercial — Field/Pasture Industrial — Agricultural Residential — Other: Canopy Cover — Partly open Partly shaded — Open Shaded		Indicate the dominant type Trees Shrubs Grasses Herbaceous Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <16ft Wetland Present Yes No Wetland ID		
AQUATIC VEGETATION		Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Attached algae				

MACROINVERTEBRATES OR OTHER OBSERVATIONS AND NOTES

MACROINVERTEBRATES OR OTHER OBSERVATIONS AND NOTES

MACROINVERTEBRATES ON this form represents the data collected in 2015. The stream was revisited on 11/19/2019. The presence of a stream channel and OHWM was confirmed.



Photograph Direction South

Date: 03/31/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/19/2019

STREAM ID S-G2	STREAM NAME Little Cherrystone Creek
LAT 36.85188 LONG -79.386151	DATE 03/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS G. Stevens, A. Rodrian, S. H	Kelly
FLOW REGIME	WATER TYPE
Perennial — Intermittent Ephemeral	TNW RPW NRPW

Perenniai -	_ Intermitte	nt <u> Ephem</u>	eral TNW	RPW 🚣	NRPW —		
					a, = :		
					Stream Erosion None Moderate Heavy		
		Top of Bank Width: 7.0 ft Top of Bank Height:			NoneNoderateTreavy		
		•	· ·	in	Artificial, Modified or Char	nnelized	
			in RB <u>20.0</u>	<u></u>	Yes No		
CHANNEL FE	ATURES	·	th: 20.00 in		Dam PresentYes _v_No		
			th: 4.0 ft			_	
		Ū	Mark: <u>15.0 in</u>		Sinuosity <u>v</u> Low	Medium High	
		Flow Direc	tion: Southeast		Gradient		
					<u>✓</u> Flat Moderate (0.5/100 ft) (2 ft/100 ft)	Severe (10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	,	
			r, stream bed dry		Morphology Types		
		Stream			Riffle 20 % Run 50 % Pool 30 %		
FLOW	ICTICC	Standing	•		1 001 30 /0		
CHARACTER	151105	<u></u>			Turbidity	Annalis Tradital	
		Velocity Fast	Modorato		✓ Clear — Slightly — Opaque — Stained		
		Fasi ✓ Slow	Moderate		Other		
INOR	GANIC SUR	STRATE COMPONENTS		n	RGANIC SUBSTRATE CON	/PONENTS	
		add up to 100%)		_	(does not necessarily add up to 100%)		
Substrate Type	Diameter		% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock			0	Detritus	sticks, wood, coarse		
Boulder		mm (10")	0	Detritus	plant materials (CPOM)	35	
Cobble		m (2.5"-10")	0	Muck-Mud	black, very fine organic	0	
Gravel		(0.1"-2.5")	5		(FPOM)	U	
Sand		nm (gritty)	60			0	
Silt		0.06 mm	35	Marl	grey, shell fragments		
Clay	< 0.004 i	mm (slick)	0		Indicate the demineration	(0)	
		Predominant Surrounding Landuse ✓ Forest Commercial — Field/Pasture Industrial — Agricultural Residential — Other: Canopy Cover			Indicate the dominant type Trees Shrub		
					Grasses Herba	iceous	
WATERSHED				tial Floodplain Width			
FEATURES					Wide > 30ft Moderate 15-30ft		
					✓ Narrow <16ft		
		Partly open Partly shaded			Wetland Present ✓ Yes No		
		ShadedOpen			Wetland ID W-G2		
		Indicate the dominant type and record the dominant species present					
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae					
				,aoneu aiya			
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES							



Photograph Direction NW