STREAM ID S-C20	STREAM NAME UNT to Maggodee Creek			
LAT 37.055216 LONG -79.833884	DATE 04/07/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS L.Harloe, K.Lamontagne, L.	Summers			
FLOW REGIME Perennial — Intermittent— Ephemeral	WATER TYPE TNW RPW NRPW			

					Stream Erosion	Haarin	
		Top of Bank Width: 4 ft			None <u>v</u> Moderate	пеаvy	
		Top of Bank		•_	Artificial, Modified or Char	nnelized	
		LB <u>8.0</u> i	-	<u>in</u>	<u>✓</u> YesNo		
CHANNEL FEATU	JRES		h: 0.00 in		Dam PresentYes _	∠ No	
		Water Widtl			Sinuosity <u>~</u> Low	Medium High	
		ŭ	Mark: 8.0 in			Tilgii	
		Flow Direct	ion: INOITII		Gradient Flat ✓ Moderate	Severe	
						(10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	esented by Stream	
		✓ No water Stream b	r, stream bed dry		Morphology Types Riffle % Run	%	
		Standing			Pool %	70	
FLOW CHARACTERISTI	ics	Flowing \					
					Turbidity ClearSlightly	turbidTurbid	
		Velocity Fast Moderate Slow			ClearSlightly turbidTurbid OpaqueStained Other		
INORGANIC SUBSTRATE COMPONENTS			MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS	
((should a	add up to 100		(does not necessarily add up 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")	10	2011.11.00	plant materials (CPOM)	100	
· · · · · · · · · · · · · · · · · · ·		m (2.5"-10")	5	Muck-Mud	black, very fine organic		
h		(0.1"-2.5")			(FPOM)		
Sand		nm (gritty)	5				
Silt		0.06 mm	40	Marl	grey, shell fragments		
Clay	< 0.004 mm (slick)		40 Int Surrounding Lan	duso	Indicate the dominant type	(Chaok ana)	
WATERSHED FEATURES		✓ Forest	Commer		✓ Trees Shrub		
		Field/Pa	astureIndustrial		Grasses Herba		
		Agricult	ural Resident	tial	Floodplain Width		
		Other:			Wide > 30ft Mode	rate 15-30ft	
		Canopy Co			✓ Narrow <16ft		
		Partly o		aded	Wetland PresentYes	∨ No	
		<u>✓</u> Shaded	Open		Wetland ID		
					dominant species present	lina Francisco	
AQUATIC VEGET	ATION	Rooted Floating		Rooted subma	_	ingFree floating	
				aorioa aiga	· -		

	Disturbed from fill of what looks to be an old road. Abundant garbage in banks. Information listed on this form represents the data collected in 2015. The stream was revisited
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	on 11/08/2019. The presence of a stream channel and OHWM was confirmed



Photograph Direction North

Comments: 2015 stream identification.



Photograph Direction East

Date: 11/08/2019

STREAM ID S-C19	STREAM NAME Maggodee Creek			
LAT 37.055101 LONG -79.830081	DATE 04/07/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS L.Harloe, K.Lamontagne, L.	Summers			
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW			

		Estimate N	leasurements		Stream Erosion	
		Top of Ban	k Width: 45 ft		None Moderate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Char	nelized
		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	✓ Yes No	
CHANNEL FE	ATURES	Water Dept	h: 2.00 ft		Dam Present <u>✓</u> Yes _	No
		Water Widt	h: 40.0 ft			
		High Water	Mark: 3.0 ft		Sinuosity Low	Medium High
		Flow Direct	ion: South		Gradient	
						Severe (10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	sented by Stream
			r, stream bed dry		Morphology Types Riffle 75 % Run 25	%
		Stream Standing	ped moist		Pool %	/0
FLOW CHARACTER	ISTICS	Flowing				
CHARACTER	131103	_			Turbidity	امناس کا امناس با
		Velocity	Modorato		ClearSlightly turbidTurbidTurbidStained	
		Fast Moderate Slow			OpaqueStainedOther	
INORGANIC SUBSTRATE CO			MDONENTS	0	RGANIC SUBSTRATE COM	IDONENTS
iii Oi		add up to 10			does not necessarily add u	
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			5	Deteitere	sticks, wood, coarse	
Boulder	> 256	mm (10")	25	Detritus	plant materials (CPOM)	5
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	า (0.1"-2.5")	10	Widok-Widd	(FPOM)	
Sand	0.06-2r	nm (gritty)	5			
Silt	0.004-0	0.06 mm	15	Marl	grey, shell fragments	
Clay	< 0.004	004 mm (slick)				
WATERSHED FEATURES			nnt Surrounding Lan	duse	Indicate the dominant type ✓ Trees Shrub	
		✓ Forest Field/Pa	Commer asture Industrial		Grasses Herba	
		Agricult			_	
		Other:	<u>—</u>		Floodplain Width ✓ Wide > 30ft Moder	rate 15-30ft
		0			Narrow <16ft	atc 10-001t
		Canopy Co		aded		
		Shaded	· <u> </u>		Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and	d record the o	dominant species present	
AQUATIC VE	GETATION	Rooted	emergent	Rooted subme	ergentRooted float	ingFree floating
		Floating	g algae	Attached alga	е	

	This reach is below a dam. Each side was mapped with access overland. Unable to cross creek, too deep.
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 11/08/2019. The presence of a stream channel and OHWM was confirmed



Photograph Direction North

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/08/2019

STREAM ID S-KL36			STREA	STREAM NAME UNT to Blackwater River			
CLIENT MVP			PROJE	PROJECT NAME MVP			
LAT 37.05319	97 L	ONG -79.88410	DATE (08/29/20	016	COUNTY Franklin	
INVESTIGATO	ORS J. Co	ook, S. Pilcher, A	. Flake				
TNW	RPW [NRPW	FLOW Perennia	REGIM al	1E Intermi	ttent Ephemeral]
		Estimate Mea	asurements			Sinuosity Low 🗸	Medium High
Estimate Measuren Top of Bank Width: _ Top of Bank Height:			Width: 10.0 Height:			Gradient Flat	oderate Severe ft/100 ft) (10 ft/100 ft)
		LB <u>3.0</u> f		.0ft		Stream Erosion None Moderate	Heavy
		Water Depth:				Artificial, Modified or Char	_ ,
CHANNEL FE	ATURES	Water Width:			_	Yes V	
			Water Mark (W			Within Roadside Ditch	
		, ,	n Water Mark (H	eight): _	<u>4.0</u> in	Yes ✓N	0
		Flow Direction	n: Southeast			Culvert PresentYes	
						Culvert Material:	
		14/-4 D	-4			Culvert Size:in	
FLOW	Water PresentNo water, streamStream bed moistStanding water		stream bed dry d moist vater			Proportion of Reach Representation of Reach Representa	ter if water present)
CHARACTER	ISTICS	Flowing wa	iter			Turbidity	
		Velocity				Clear Slightly	turbid Turbid
			_ Moderate	erate		Other	_
		Slow					
INOR	-	UBSTRATE CO ld add up to 10				ORGANIC SUBSTRATE CO (does not necessarily add u	
Substrate Type	(shou					(does not necessarily add u	up to 100%)
Substrate Type Bedrock	(shou	ld add up to 10	0%) 100 % Compositi	each	Substrate Type	e Characteristic sticks, wood, coarse	% Composition in Sampling Area
Substrate Type Bedrock Boulder	(shou	meter 56 mm (10")	0%) 100 % Compositi Sampling Re	each	Substrate	(does not necessarily add u	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble	(shou) Dia > 29 64-256	meter 56 mm (10") 6 mm (2.5"-10")	% Compositi Sampling Re	each	Substrate Type	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	% Compositi Sampling Re	each	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM)	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty)	0%) 100 % Compositi Sampling Re	each	Substrate Type Detritus Muck-Muck	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM)	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shou Dia	meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm	% Compositi Sampling Re	each	Substrate Type Detritus	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shou Dia	756 mm (10") 756 mm (2.5"-10") 75mm (0.1"-2.5") 75mm (gritty) 75mm (gritty) 75mm (gritty) 75mm (gritty)	9%) 100 % Compositi Sampling Re 10 30 40 20	each	Substrate Type Detritus Muck-Muck	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shou Dia	756 mm (10") 756 mm (2.5"-10") 75mm (0.1"-2.5") 75mm (gritty) 75mm (gritty) 75mm (gritty) 75mm (gritty)	% Compositi Sampling Re 10 30 40 20 Surrounding I	_anduse nercial trial lential	Substrate Type Detritus Muck-Muck	classic does not necessarily add use Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shou Dia	dadd up to 100 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant ✓ Forest — Field/Past — Agricultura	% Compositi Sampling Re 10 30 40 20 Surrounding I — Comr ture — Indust al — Resid — Other:	_anduse nercial trial lential	Substrate Type Detritus Muck-Muc Marl	closes not necessarily add use Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Moder	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove Open	% Compositi Sampling Re 10 30 40 20 Surrounding I — Comr ture — Indust al — Resid — Other:	_andusc	Substrate Type Detritus Muck-Muc Marl	closes not necessarily add use Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Moder	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove Open Shaded	% Compositi Sampling Re 10 30 40 20 Surrounding I — Comr ture — Indust al — Resid — Other:	_anduse mercial trial lential shaded	Substrate Type Detritus Muck-Muc Marl e	closes not necessarily add use Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Moder	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove Open Shaded	% Composition % Composition Sampling Research 10 30 40 20 t Surrounding I ————————————————————————————————————	_andusc mercial trial lential shaded	Substrate Type Detritus Muck-Muc Marl e	closes not necessarily add use Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Narrow <15ft OTHER NOTES AND OBSE	% Composition in Sampling Area



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

STREAM ID S-F11	STREAM NAME Blackwater River
LAT 37.052798 LONG -79.825762	DATE 04/04/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Flake, E. Strohmaier, D.	McCullough
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW RPW NRPW NRPW

			leasurements		Stream Erosion		
		Top of Bank Width: 100 ft		<u>✓</u> NoneModerate	Heavy		
		Top of Bank	k Height:		Artificial, Modified or Char	nelized	
		LB <u>20.0</u> f	t RB <u>20.0</u>	<u>'t</u>	Yes _ <u>✓</u> No		
CHANNEL FE	ATURES	Water Dept	h: <u>7.00 in</u>		Dam Present Yes	. No	
		Water Widtl	n: <u>89.0 ft</u>			_	
		High Water	Mark:ft		Sinuosity Low	Medium High	
		Flow Direct	ion: North		Gradient		
						Severe	
						(10 ft/100 ft)	
		Water Pres	ent r, stream bed dry		Proportion of Reach Repre Morphology Types	sented by Stream	
		Stream b			Riffle 25 % Run 75	%	
EL OW		Standing			Pool %		
FLOW CHARACTERISTICS		<u>✓</u> Flowing v	water		Turbidity		
		Velocity			Clear Slightly	turbidTurbid	
		Fast Moderate			OpaqueStained		
Slow					Other		
INOR		STRATE CO		ORGANIC SUBSTRATE COMPONENTS			
	(should	add up to 100	•	(does not necessarily add up 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")			plant materials (CPOM)		
Cobble		m (2.5"-10")		Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")			(FPOM)		
Sand		nm (gritty)					
Silt		0.06 mm		Marl	grey, shell fragments		
Clay	< 0.004	< 0.004 mm (slick)		4		(0)	
		✓ Forest	nt Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/Pa			Grasses Herba	ceous	
		Agricult	ural Resident	ial	Floodplain Width		
WATERSHED FEATURES		Other:			Wide > 30ft Mode	rate 15-30ft	
		Canopy Co	ver		✓ Narrow <16ft		
		Partly o	pen 🔽 Partly sh	aded	Wetland Present Yes	✓ No	
		Shaded	Open		Wetland ID	- 140	
			• •		dominant species present		
AQUATIC VE	GETATION		· -	Rooted subm	_	ingFree floating	
		Floating algae Attached alg			C		

	Data on OHWM was collected in 2019 during delineation confirmations and is listed below.
OR OTHER WILDLIFE	OHWM width - 90 ft OHWM height- 108 in
OBSERVED/OTHER OBSERVATIONS AND NOTES	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/08/2019, then again on 12/04/2020.



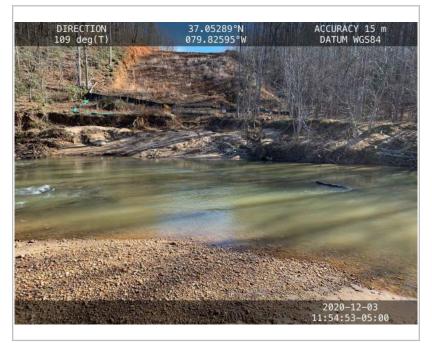
Photograph Direction North

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/08/2019



Photograph Direction ESE

Date: <u>12/03/2020</u>

Comments: 2020 stream identification.

Photograph	Direction	
Date:		
Comments:		

STREAM ID	3-KL35		STREAM NA	STREAM NAME UNT to Blackwater River				
	CLIENT MVP			PROJECT NAME MVP				
LAT 37.05208		ONG -79.885564		DATE 08/29/2016 COUNTY Franklin				
INVESTIGATO	DRS J. Co	ook, S. Pilcher, A.	. Flake					
WATER TYPE		NRPW	FLOW REG Perennial		ittent Ephemeral			
CHANNEL FEATURES Water Depth:2.0 Water Width:2.0 Ordinary High Wate Ordinary High Wate Flow Direction:Soi			vidth:4.0ft leight:	: <u>2.5</u> ft	Within Roadside Ditch Yes No Culvert Present Yes No Culvert Material: Concrete Culvert Size:24 in Proportion of Reach Represented by Stream Morphology Types (Only enter if water present)			
	Stream bed moisStanding water			Riffle 40 % Run 60 % Pool % Turbidity ClearSlightly turbidTurbidTurbid				
INOR	INORGANIC SUBSTRATE COMPON (should add up to 100%)				ORGANIC SUBSTRATE COM (does not necessarily add u			
Substrate Type	Diar	meter	% Composition in Sampling Reach	Substrat Type	te Characteristic	% Composition in Sampling Area		
Bedrock				Detritus	sticks, wood, coarse	Γ		
Boulder		56 mm (10")		200	plant materials (CPOM)			
Cobble		6 mm (2.5"-10")	25	Muck-Mu	black, very fine organic			
Gravel		mm (0.1"-2.5")	20		d (FPOM)			
Sand	0.06-	-2mm (gritty)	40					
Silt	0.00	04-0.06 mm	15	Marl	grey, shell fragments			
Clay	< 0.00	04 mm (slick)						
WATERSHED FEATURES	PredominantForestField/Pastu AgriculturaROW Canopy CoveOpenShaded	Residential Other:	al I	Floodplain Width Wide > 30ft Modera ✓ Narrow <15ft	ate 15-30ft			
	l l							
MAC	ROINVER	TEBRATES/OTH	HER WILDLIFE OBS	SERVED OF	R OTHER NOTES AND OBSER	RVATIONS		



Photograph Direction North

STREAM ID S-F9B	STREAM NAME UNT to Blackwater River			
LAT 37.047178 LONG -79.813345	DATE 04/04/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS A. Flake, E. Strohmaier, D. McCullough				
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —			

			leasurements		Stream Erosion	Haarini	
			k Width: 15 ft		None Moderate	neavy	
		Top of Bank Height:			Artificial, Modified or Char	nnelized	
		LB <u>4.0</u>	ft RB <u>4.0</u>	<u>ft</u>	Yes No		
CHANNEL FE	ATURES	Water Dept	th: 1.00 in		Dam PresentYes _	∠ No	
		Water Widt	h: <u>6.0 ft</u>		- -		
		High Water	Mark: <u>8.0 in</u>		Sinuosity Low	Medium High	
		Flow Direct	tion: Northwest		Gradient		
					Flat Moderate (2.5/100 ft)	Severe (10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types Riffle 60 % Run	%	
		Stream I			Pool 40 % Ruii	70	
FLOW CHARACTER	ISTICS	Standing	•		70		
CHARACTER	131103	<u>-</u>			Turbidity	امناسان ا	
		Velocity Fast	Moderate		Clear Slightly Stained		
		Fast ✓ Slow	iviouerate		Other		
INOR	CANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CON	IDONENTS	
		add up to 10		_	(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")	10	Detilitus	plant materials (CPOM)	50	
Cobble	64-256 m	m (2.5"-10")	50	Muck-Mud	black, very fine organic		
Gravel	2-64 mm	1 (0.1"-2.5")	20	Widok Wida	(FPOM)		
Sand	0.06-2r	nm (gritty)	20				
Silt		0.06 mm		Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)					
		Predomina ✓ Forest	ant Surrounding Lan Commer	iduse	Indicate the dominant type ✓ Trees Shrub		
			astureIndustrial	Ciai 	Grasses Herba		
		Agricult			_	00000	
WATERSHED FEATURES	WATERSHED		_		Floodplain Width Wide > 30ft Model	rato 15 30ff	
TEATORES		Other:			Narrow <16ft	rate 13-301t	
		Canopy Co		aded	_		
		Shaded			Wetland PresentYes Wetland ID	<u>v</u> No	
			e dominant type and	d record the	dominant species present		
AQUATIC VEGETATION		L L A A + A A	omorgont	Pootod cubm	argant Pooted float	ina Free tloatina	
AQUATIC VE	GETATION			Attached alga	ergentRooted float	ingince iloating	

	Upper segment (S-F9A) was determined to be intermittent and is highly degraded from cattle use. Lower segment of stream (S-F9B) was determined to be perennial based on continuous flow. Veg and fish are present in lower segment channel.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Center line was surveyed.
	Lower segment (S-F9B) flow direction north.
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed



Photograph Direction SSE

Comments: 2015 stream identification.



Photograph Direction SSE

Date: 11/09/2019

STREAM ID S-II2	STREAM NAME Little Creek
LAT 37.050229 LONG -79.907716	DATE 08/09/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Lands, K. Larsen, L. Sext	ton
FLOW REGIME Perennial — Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perennial _	eral <u> </u>	TNW	RPW 👱	NRPW			
		Estimate Measurements				Stream Erosion	
		Top of Bank Width: 60 ft				NoneModerate	Heavy
		Top of Ban	_			Artificial, Modified or Char	nnelized
		LB <u>15.0</u>	<u>in</u>	RB <u>8.0</u>	<u>ft</u>	Yes No	
CHANNEL FE	ATURES	Water Dep	th: <u>1.0</u>	0 ft		Dam Brasent Voc	No
		Water Widt	h: 2.0	ft_		Dam PresentYes _	NO
		High Water	Mark:	<u>6.0 in</u>		Sinuosity Low	Medium High
		Flow Direct	ion: S	outh		Gradient	
						✓ FlatModerate	Severe
						(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)
		Water Pres		m bed dry		Proportion of Reach Representation Morphology Types	esented by Stream
		Stream I				Riffle 40 % Run 60	%
FLOW		Standing	g watei	-		Pool %	
CHARACTER	ISTICS	<u></u> Flowing	water			Turbidity	
		Velocity				Clear Slightly	turbidTurbid
			<u>•</u> Mo	oderate		OpaqueStained	
		Slow				Other	
INOR	GANIC SUB			ENTS		RGANIC SUBSTRATE COM	
Cubatasta	(snould a	add up to 10		`ii i-		does not necessarily add u	
Substrate Type	Diame	ter	Saı	composition in mpling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				50	Detritus	sticks, wood, coarse	
Boulder		mm (10"))		plant materials (CPOM)	40
Cobble		m (2.5"-10")		0	Muck-Mud	black, very fine organic	
Gravel		(0.1"-2.5")		5		(FPOM)	
Sand		nm (gritty)		15			
Silt		0.06 mm	5	5	Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)	0				
		✓ Forest	ınt Sui	rounding Lan Commer		Indicate the dominant type Trees✓ Shrub	€ (Check one)
		Field/Pasture Industrial			Grasses Herba		
WATERCHER		Agricultural Residential		tial	Floodplain Width		
WATERSHED FEATURES		Other:				✓ Wide > 30ft Mode	rate 15-30ft
		Canopy Cover				Narrow <16ft	
		Partly open Partly shaded			aded	Wetland Present Yes ✓ No	
		Shaded	ı	Open		Wetland ID	<u>- 110</u>
AQUATIC VEGETATIONR			Indicate the dominant type and record the dominant species present				
		Rooted		_	Rooted subme Attached alga	_	tingFree floating
		FIOAUIT	y alyae	<u> </u>	Allacried alga	<u> </u>	
		Not dotowe	:		da ab.ut launa a	atua a an i hout coithin hand.	
		Not determ	inea. R	liverine wetian	us abut large s	stream, but within bank.	
MACROINVER	RTERRATES						
OR OTHER WILDLIFE							
OBSERVED/C							
OBSERVATION NOTES	INS AND						



Photograph Direction South

STREAM ID S-F10	STREAM NAME UNT to Blackwater River
LAT 37.047976 LONG -79.81407	DATE 04/04/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Flake, E. Strohmaier, D. I	McCullough
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW <u>✓</u>

Perennial –	Intermitte	nt Epheme	eral TNW	RPW —	NRPW <u> </u>		
		Estimate N	leasurements		Stream Erosion		
		Top of Bank Width: 9 ft			None Moderate .	Heavy	
		Top of Banl	k Height:		Artificial, Modified or Chan	inelized	
		LB <u>3.0</u>	ft RB <u>4.0</u>	<u>ft</u>	Yes _ <u>/</u> No		
CHANNEL FE	ATURES	Water Dept	h: 0.00 in				
011111111111111111111111111111111111111	71101120	Water Widt	h: <u>0.0 ft</u>		Dam PresentYes	<u>∠</u> No	
		High Water	Mark: <u>3.0 in</u>		Sinuosity 🔽 Low	Medium High	
		Flow Direct	ion: West		Gradient		
					Flat	Severe (10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	sented by Stream	
		✓ No water ✓ Stream b	r, stream bed dry ned moist		Morphology Types Riffle % Run	%	
···		Standing			Pool %		
FLOW CHARACTER	ISTICS	Flowing	water		Touchidia.		
		Note : to			Turbidity ClearSlightly to	turbidTurbid	
		VelocityFast Moderate			OpaqueStained		
		Slow			Other		
INOR		STRATE CO		_	ORGANIC SUBSTRATE COMPONENTS		
Cubatasta	(should	add up to 100		-	does not necessarily add up		
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder		mm (10")			plant materials (CPOM)	100	
Cobble		ım (2.5"-10")	5	Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")	10		(FPOM)		
Sand Silt		nm (gritty) 0.06 mm	15	Marl	grov shall fragments		
Clay		mm (slick)	35 35	IVIAII	grey, shell fragments		
Ciay	10.004		າnt Surrounding Lan	lduse	Indicate the dominant type	(Check one)	
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrubs		
		Field/PastureIndustrial			Grasses Herba	ceous	
WATERSHED		Agricult Other:	ural Resident	tial	Floodplain Width		
FEATURES		001161.			Wide > 30ft Moderate 15-30ft		
		Canopy Co	over		✓ Narrow <16ft		
		Partly o		aded	Wetland PresentYes Wetland ID	<u>✓</u> No	
Indicate the do					dominant species present		
AQUATIC VE	GETATION	RootedFloating	_	Rooted subme Attached alga	_	ingFree floating	
		Information on 11/09/20	listed on this form re 019. The presence of	presents the d a stream char	lata collected in 2015. The str nnel and OHWM was confirm	eam was revisited	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
MACROINVERTEBRATES OR OTHER WILDLIFE	
OBSERVED/OTHER OBSERVATIONS AND NOTES	
NOTES	



Photograph Direction SW

Comments: 2015 stream identification.



Photograph Direction SW

Date: 11/09/2019

STREAM ID	STREAM ID S-CD1		STREAM NA	STREAM NAME UNT to Blackwater River			
	CLIENT MVP			PROJECT NAME MVP			
LAT 37.04828		ONG -79.897648		DATE 04/05/2016 COUNTY Franklin			
INVESTIGATO	ORS HS,C	CW,AC					
WATER TYPE		NRPW	FLOW REG Perennial		ttent Ephemeral		
		Estimate Mea	surements		Sinuosity Low 🗸	Medium High	
CHANNEL FE	ATURES	Top of Bank W Top of Bank H LB <u>1.5</u> ft Water Depth: Water Width: Ordinary High	Vidth:ft leight:	ft	Gradient Flat Moderate Severe (0.5/100 ft) Stream Erosion None Moderate Heavy Artificial, Modified or Channelized Yes No Within Roadside Ditch Yes No Culvert Present Yes No Culvert Material: Culvert Size:in		
## Water Present No water, stream Stream bed mois Standing water Flowing water Velocity Fast Slow Water Present No water, stream Stream bed mois Velocity Flowing water Velocity Slow			tream bed dry moist rater		Proportion of Reach Repres Morphology Types (Only ente Riffle 80 % Run 20 Pool % Turbidity ClearSlightly to Other	er if water present) %	
INORGANIC SUBSTRATE COMPORT (should add up to 100%)					ORGANIC SUBSTRATE COM (does not necessarily add u		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	· ·	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detilius	plant materials (CPOM)		
Cobble	64-256	mm (2.5"-10")	10	Muck-Muc	black, very fine organic		
Gravel	2-64 r	nm (0.1"-2.5")	10	WIGCK-WIGC	(FPOM)		
Sand	0.06	-2mm (gritty)	80				
Silt	0.00	4-0.06 mm		Marl	grey, shell fragments		
Clay	< 0.00	04 mm (slick)					
			Residential Other:	al	Floodplain Width Wide > 30ft Modera Narrow <15ft	nte 15-30ft	
MAC	ROINVER	TEBRATES/OTI	HER WILDLIFE OBS	SERVED OR	OTHER NOTES AND OBSER	RVATIONS	
Mayflies, 2 species caddisflies							



Photograph Direction South

STREAM ID S-F9a	STREAM NAME UNT to Blackwater River			
LAT 37.047179 LONG -79.813345	DATE 04/04/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS A. Flake, E. Strohmaier, D. McCullough				
FLOW REGIME Perennial Intermittent ✓ Ephemeral	WATER TYPE TNW RPW_✓ NRPW			

			Measurements		Stream Erosion	4 Hoon
		-	k Width: <u>15.0 ft</u>		NoneModerate	<u> —</u> пеаvy
		Top of Ban	-	, ,	Artificial, Modified or Char	nelized
		LB <u>4.0</u>		<u>ft</u>	Yes No	
CHANNEL FE	ATURES	·	th: 1.00 ft		Dam PresentYes _	✓ No
		Water Widt	h: <u>6.0 ft</u>		_	
		High Water	Mark:ft		Sinuosity Low	Medium High
		Flow Direct	tion: NW		Gradient	
						Severe (10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Representation Morphology Types	sented by Stream
		Stream b	•		Riffle 60 % Run	%
EL OW		✓ Standing			Pool 40 %	
FLOW CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			Clear Slightly	turbidTurbid
			Moderate		OpaqueStained	
		<u>✓</u> Slow	1		Other	
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		mm (10")	10	Detrituo	plant materials (CPOM)	50
Cobble		m (2.5"-10")	50	Muck-Mud	black, very fine organic	
Gravel		1 (0.1"-2.5")	20		(FPOM)	
Sand		nm (gritty)	20			
Silt		0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)		4		(2)
		✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
		✓ Field/Pa			Grasses Herbaceous	
WATERSHED		Agricult	ural Resident	tial		
FEATURES		Other:			Floodplain Width Wide > 30ft Moderate 15-30ft	
		Canopy Co	over		✓ Narrow <16ft	
					Wetland PresentYes	✓ No
		Shaded	OpenOpen		Wetland ID	
			,,		dominant species present	
AQUATIC VE	ETATION	— Rooted Floating	_	Rooted submer Attached alga		ingFree floating
				aorioa aiga		

	Upper segment was determined to be intermittent and is highly degraded from cattle use. Center line was surveyed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Information listed on this form represents the data collected in 2015. The stream was not accessible for survey in 2019 to reconfirm the presence of a stream channel and OHWM.



Photograph Direction ESE

STREAM ID S-MM29	STREAM NAME UNT to Maple Branch
LAT 37.043839 LONG -79.822841	DATE 09/16/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Grech, A. Stott, L.Sexton	
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

		Estimate Measurements			Stream Erosion	
Top of Bank Width: 15 ft		k Width: 15 ft		NoneModerate	Heavy	
		Top of Bank Height:		Artificial, Modified or Char	nnelized	
		LB <u>5.0</u>	ft RB <u>12.0</u>	<u>ft</u>	Yes No	
CHANNEL FE	ATURES	Water Dep	th: 2.00 in		Daw Barant Van	. Ma
	/ O	Water Widt	h: 7.0 ft		Dam PresentYes _	<u>∠</u> No
		High Water	Mark: <u>1.0 ft</u>		Sinuosity 🔽 Low	Medium High
		Flow Direct	tion: Northwest		Gradient	
						Severe
					` , ,	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
		Stream I			Riffle 70 % Run	%
FLOW		Standing			Pool 30 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			✓ ClearSlightly	turbidTurbid
			✓ Moderate		OpaqueStained	
		Slow			Other	
INOR		STRATE CO	MPONENTS	_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)	
Substrate Type	Diame	-	% Composition in Sampling Reach		Characteristic	% Composition in Sampling Area
Bedrock			90		sticks, wood, coarse	
Boulder	> 256	mm (10")		Detritus	plant materials (CPOM)	20
Cobble	64-256 m	m (2.5"-10")	5	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")		WIGGK-WIGG	(FPOM)	
Sand	0.06-2n	nm (gritty) 5				
Silt	0.004-0	-0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 i	mm (slick)				
	Predominant Surrounding Lan			Indicate the dominant type ✓ Trees Shrub	(Check one)	
	✓ Forest Comme Field/Pasture Industria				Grasses Herba	
		Agricult		tial	— — —	
WATERSHED FEATURES		✓ Other:	Access road		Floodplain Width Wide > 30ft ✓ Mode	rate 15-30ft
		Canopy Cover		Narrow <16ft		
		<u>✓</u> Partly openPartly shaded		Wetland Present Vos	√ No	
Sha		Shaded			Wetland PresentYes Wetland ID	<u>v</u> No
Indicate the dominant type and record the dominant species present						
			Rooted subme		tingFree floating	
Floating algaeAttached algae						
		1				
					lata collected in 2015. The st	
on 11/09/2019. The presence of a stream channel and OHWM was confirmed.			iea.			
MACROINVER OR OTHER	VIEDKAIES	Ί.				
WILDLIFE OBSERVED/C	THER					
OBSERVATIONS AND NOTES						
1.0120						

Stream Photograph Page

Stream ID S-MM29



Photograph Direction East

Date: 09/16/2015

Comments: 2015 stream identification.



Photograph Direction ESE

Date: 11/09/2019

STREAM ID S-MM23	STREAM NAME Maple Branch
LAT 37.043714 LONG -79.823066	DATE 09/16/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Grech, A. Stott, L.Sexton	
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

				Stream Erosion			
		Top of Bank Width: 20 ft		None Moderate	неаvy		
		Top of Ban	· ·	_	Artificial, Modified or Char	nelized	
		LB <u>5.0</u>	ft RB <u>3.0</u>	<u>ft</u>	Yes No		
CHANNEL FE	ATURES	Water Dept	th: 18.00 in		Dam Present Yes	∠ No	
		Water Widt	h: <u>12.0 ft</u>			_	
		High Water	Mark: <u>3.0 ft</u>		Sinuosity 🔽 Low	Medium High	
		Flow Direct	tion: North		Gradient		
						Severe	
		Water Pres				(10 ft/100 ft)	
			r, stream bed dry		Proportion of Reach Repre Morphology Types	sented by Stream	
			ped moist		Riffle 15 % Run 70	%	
FLOW		Standing			Pool 15 %		
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity		
		Velocity		✓ ClearSlightly	turbidTurbid		
		Fast			OpaqueStained		
SlowOther							
INOR	INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS						
	(snould	add up to 10	<u>'</u>	`	(does not necessarily add up to 100%)		
Substrate Type	Diame	% Composition in Sampling Reach		Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock		50		Detritus	sticks, wood, coarse		
Boulder	> 256	mm (10")	10	Detrituo	plant materials (CPOM)	10	
Cobble		m (2.5"-10")		Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")			(FPOM)		
Sand		nm (gritty)	10				
Silt		0.06 mm	30	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	C			(0)	
		✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/Pa			Grasses Herba		
WATERSHED FEATURES		Agricult	ural Resident	tial	Floodulein Width		
		Other:			Floodplain Width Wide > 30ft Moderate 15-30ft		
		Canopy Cover ✓ Partly open Partly shaded			✓ Narrow <16ft		
				aded	Wetlered Burnered - Ven	4 No	
		<u></u> 1 and 9	ShadedOpen				
			Open		Wetland PresentYes Wetland ID	<u>v</u> No	
		Shaded Indicate th	e dominant type and		Wetland ID dominant species present	_	
AQUATIC VEC	GETATION	Shaded Indicate th ∠ Rooted	e dominant type and	Rooted subme	Wetland ID dominant species present ergentRooted float	_	
AQUATIC VEC	GETATION	Shaded Indicate th ∠ Rooted	e dominant type and		Wetland ID dominant species present ergentRooted float	_	

	Minnow species present
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 11/09/2019. The presence of a stream channel and OHWM was confirmed

Stream Photograph Page

Stream ID S-MM23



Photograph Direction South

Date: 09/16/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/09/2019

STREAM ID S-GG4	STREAM NAME UNT to Blackwater River	
LAT 37.043006 LONG -79.80905	DATE 07/26/2015	
CLIENT MVP	PROJECT NAME MVP	
INVESTIGATORS P Johnson, M Whitten, C Wharton		
FLOW REGIME Perennial — Intermittent— Ephemeral ✓	WATER TYPE TNW RPW NRPW ✓	

Estimate Measurements			Stream Erosion			
		Top of Bank Width: 5 ft		None Moderate	Heavy	
		Top of Ban	k Height:		Artificial, Modified or Char	nelized
		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	<u>✓</u> YesNo	
CHANNEL FE	ATURES	Water Dept	th: 0.00 in		Dam PresentYes	. No
		Water Widt	h: <u>0.0 ft</u>		Dalli Fleselli 165 _	NO
		High Water	Mark: 2.0 ft		Sinuosity Low	Medium High
		Flow Direct	tion: North		Gradient	
						Severe
		W-4 D	4		, ,	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	sented by Stream
		Stream			Riffle 15 % Run 70	%
FLOW		Standing			Pool 15 %	
CHARACTER	ISTICS	Flowing	water		Turhidity	
		Velocity			Turbidity ClearSlightly turbidTurbid	
		,	Moderate		OpaqueStained	
		Slow			Other	
INOR	INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS			IPONENTS		
(should add up to 100%)		(0	does not necessarily add u	p 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")		Detritus	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	10	Muck-Mud	black, very fine organic	35
Gravel		า (0.1"-2.5")	10		(FPOM)	33
Sand		nm (gritty)	35			
Silt		0.06 mm	45	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)		_		
		Predomina Forest	ant Surrounding Lan		Indicate the dominant type Trees Shrub	
		Forest Commercial Industrial			✓ Grasses — Herba	
WATERSHED FEATURES		Agricult			_	00000
		Other:	_		Floodplain Width Wide > 30ft Model	rato 15 30ft
					Narrow <16ft	ale 13-3011
		Canopy Cover		aded	_	
		Partly open Partly shaded Shaded Open		adod	Wetland PresentYes	<u>✓</u> No
		Indicate th		d uppoud 41	Wetland ID	
AQUATIC VE	GETATION		e dominant type and ⊢emergent	Rooted subme	dominant species present ergent Rooted float	ingFree floating
AQUATIC VEGETATION				Attached alga		

	Ephemeral Stream flowing north. Stream starts as field ditch that is vegetated, mowed and maintained. It turns into a partially filled old stream that we mapped as S-GG4. Also Mapped stream by NHD system.
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 11/09/2019. The presence of a stream channel and OHWM was confirmed

Stream ID S-GG4



Photograph Direction SSW

Date: 07/26/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/09/2019

STREAM ID S-A36	STREAM NAME UNT to Foul Ground Creek
LAT 37.038091 LONG -79.804231	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS Yarbrough, Stoliker, Heule	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW <u>✓</u>

Estimate Measurements Top of Bank Width: 4 ft			
Top of Bank Height:			
CHANNEL FEATURES LB 40.0 in RB 39.0 in Water Depth: 0.00 in Water Width: 0.0 ft RB 39.0 in Yes ✓ No Dam Present Yes ✓ No			
CHANNEL FEATURES Water Depth: 0.00 in Water Width: 0.0 ft Dam Present Yes V No			
Water Width: <u>0.0 ft</u> Dam PresentYes <u>✓</u> No			
water width: 0.0 t			
High Water Mark: 21.0 in Sinuosity ✓ Low Medium	⊔iah		
	nigii		
Flow Direction: South Gradient			
Flat _ <u>✓</u> Moderate Severe (0.5/100 ft (2 ft/100 ft) (10 ft/100 ft))		
Water Present Proportion of Reach Represented by	/ Stream		
✓ No water, stream bed dry Morphology Types Stream bed moist Riffle % Run %			
Standing water Pool %			
FLOW Flowing water			
Turbidity Clear Slightly turbid	Turbid		
Velocity Glear Slightly turblu _ Fast Moderate Opaque Stained			
SlowOther			
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS			
(should add up to 100%) (does not necessarily add up to 100%)			
	iposition in oling Area		
Bedrock Detritus sticks, wood, coarse			
Boulder > 256 mm (10") plant materials (CPOM) 100	,		
Cobble 64-256 mm (2.5"-10") 20 Muck-Mud black, very fine organic			
Gravel 2-64 mm (0.1"-2.5") (FPOM)			
Sand 0.06-2mm (gritty) 80			
Silt 0.004-0.06 mm Marl grey, shell fragments Clay < 0.004 mm (slick)			
Clay < 0.004 mm (slick) Predominant Surrounding Landuse Indicate the dominant type (Check o	ne)		
Fredominant Surrounding Landase indicate the dominant type (Check of the Commercial representation	110)		
Field/PastureIndustrialGrassesHerbaceous			
WATERSHED Agricultural Residential Floodplain Width Other: Wide > 30ft Moderate 15 30ft			
Wide > Soil Moderate 15-Soil	ft		
Canopy Cover Narrow <16ft			
Partly openPartly shadedYesYes			
— Wetland ID			
Indicate the dominant type and record the dominant species present AQUATIC VEGETATION Rooted emergent Rooted submergent Rooted floating Fr	ee floating		
Floating algaeAttached algae			

	Ephemeral stream
MACROINVERTEBRATES	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
OR OTHER WILDLIFE OBSERVED/OTHER	
OBSERVATIONS AND NOTES	



Photograph Direction South

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

STREAM ID S-A38	STREAM NAME UNT to Foul Ground Creek
LAT 37.036383 LONG -79.799586	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS Yarbrough, Stoliker, Heule	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

		Estimate Measurements			Stream Erosion		
		Top of Bank Width: 9 ft			NoneModerate	L Heavy	
		Top of Bank Height:			Artificial, Modified or Channelized		
		LB <u>57.0</u>		<u>in</u>	<u>v</u> YesNo		
CHANNEL FE	ATURES	Water Dept	h: 0.50 in		Dam PresentYes _v_No		
		Water Width: 48.0 in			Dani Flesent les No		
		High Water Mark: 8.0 in			Sinuosity <u>v</u> Low	Medium High	
		Flow Direct	ion: Southeast		Gradient		
					—	Severe (10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	esented by Stream	
		No wate Stream b	r, stream bed dry		Morphology Types Riffle % Run	%	
		✓ Standing			Pool %	70	
FLOW CHARACTER	ISTICS	Flowing					
					Turbidity Clear Slightly turbid Turbid Opaque Stained Other		
		VelocityFast Moderate					
		Slow					
INOR	GANIC SUB			RGANIC SUBSTRATE COMPONENTS			
	(should	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		mm (10")		Detrituo	plant materials (CPOM)	80	
Cobble		m (2.5"-10")		Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")	10	Widok Wida	(FPOM)		
Sand		nm (gritty)	60				
Silt		0.06 mm		Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	30				
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type (Check one) ✓ Trees Shrubs		
		Field/Pa			Grasses Herbaceous		
MATEROUER		Agricult	ural Resident	tial			
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Moderate 15-30ft		
		Canopy CoverPartly openPartly shaded		✓ Narrow <16ft			
				Wetland Present Yes	✓ No		
		<u>✓</u> Shaded Open			Wetland ID	<u>v</u> 100	
					dominant species present		
AQUATIC VEGETATION		Rooted emergent Rooted submer Floating algae Attached algae			ergentRooted float	tingFree floating	
		rioating	<u></u>	Allaurieu alga	<u> </u>		

	Intermittent stream. Possibly channelized. Deep erosion in any case. This stream does have flow further downgradient and within the LOD.
MACROINVERTEBRATES OR OTHER WILDLIFE	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction South

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

STREAM ID S-A40	STREAM NAME UNT to Foul Ground Creek			
LAT 37.036033 LONG -79.799288	DATE 04/07/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS Yarbrough, Stoliker, Heule				
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW			

		Estimate Measurements			Stream Erosion		
		Top of Bank Width: 5.8 ft			NoneModerate <u></u> Heavy		
		Top of Bank Height:			Artificial, Modified or Channelized		
		LB <u>24.0</u>	<u>in</u> RB <u>25.0</u>	<u>in</u>	Yes ✓ No		
CHANNEL FE	ATURES	Water Dept	th: 4.00 in			. N	
		Water Width: 30.0 ft			Dam PresentYes <u>✓</u> No		
		High Water Mark: 15.0 in			Sinuosity 🔽 Low	Medium High	
		Flow Direct	tion: Southwest		Gradient		
					Flat Moderate Severe		
		Water Pres	ant .		(0.5/100 ft (2 ft/100 ft) Proportion of Reach Repre	(10 ft/100 ft)	
			r, stream bed dry		Morphology Types	sented by Stream	
		Stream b	·		Riffle % Run	%	
FLOW		<u>✓</u> Standing water			Pool 100 %		
CHARACTER	ISTICS	Flowing	water		Turbidity		
		Velocity Fast Moderate			✓ Clear —Slightly turbid —Turbid		
					OpaqueStained		
		Slow			Other		
INOR				DRGANIC SUBSTRATE COMPONENTS			
	(should	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")		Detilius	plant materials (CPOM)	70	
Cobble	64-256 m	m (2.5"-10")		Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")		Widok Widd	(FPOM)		
Sand	0.06-2r	nm (gritty)	45				
Silt		0.06 mm	15 Marl		grey, shell fragments		
Clay	< 0.004	mm (slick)	40				
		Predominant Surrounding Landuse ✓ Forest Commercial			Indicate the dominant type (Check one)		
		✓ Forest Field/Pa			✓ Trees Shrubs ✓ Grasses Herbaceous Floodplain Width		
		— Agricult					
WATERSHED FEATURES		Other:	_				
TEATORES	FEATURES				Wide > 30ft Moderate 15-30ft ✓ Narrow <16ft		
		Canopy Cover Partly open ✓ Partly shaded		Wetland PresentYes ✓ No Wetland ID			
		Shaded Open					
				d rooord the			
AQUATIC VEGETATION		Indicate the dominant type and record the Rooted emergent Rooted subm			ing Free floating		
		Floating algae Attached alga					
		<u></u> -					
Intermittent braided etreem Tributery to C A29 Soverely, downeys							

	Intermittent, braided stream. Tributary to S-A38. Severely downcut.				
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 11/09/2019. The presence of a stream channel and OHWM was confirmed				
NOTES					



Photograph Direction South

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

STREAM ID S-A41	STREAM NAME Foul Ground Creek				
LAT 37.0315 LONG -79.788427	DATE 04/07/2015				
CLIENT MVP	PROJECT NAME MVP				
INVESTIGATORS Yarbrough, Stoliker, Heule					
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW RPW ✓ NRPW				

		Estimate Measurements			Stream Erosion None Moderate ✓ Heavy		
		Top of Bank Width: 12 ft			NoneModerate	<u>v</u> neavy	
		Top of Bank Height:			Artificial, Modified or Channelized		
			in RB <u>48.0</u>	<u>in</u>	Yes No		
CHANNEL FE	ATURES		h: 5.00 in		Dam PresentYes _	✓ No	
		Water Widt			 _	<u> </u>	
		ľ	Mark: <u>14.0 in</u>		Sinuosity Low	wedium <u>v</u> nign	
		Flow Direct	ion: Northeast		Gradient		
					<u>✓</u> FlatModerateSevere (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)		
		Water Pres			Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types Riffle 15 % Run 75	%	
			oed moist n water		Pool 10 %	70	
FLOW CHARACTER	ISTICS	Standing water <u>✓</u> Flowing water					
OHARAGIER	101100				Turbidity Cliebath Aughid Turbid		
		VelocityFast✓ Moderate Slow			<u>✓ Clear</u> Slightly turbidTurbidOpaqueStainedOther		
INOR	GANIC SUB	SSTRATE COMPONENTS O		PRGANIC SUBSTRATE COMPONENTS			
	(should	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		mm (10")	5	Detitus	plant materials (CPOM)	10	
Cobble		m (2.5"-10")	25	Muck-Mud	black, very fine organic		
Gravel		า (0.1"-2.5")	40		(FPOM)		
Sand		nm (gritty)	15				
Silt		0.06 mm	15	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)			In dia station of a value at the same	(2)	
		✓ Forest	nnt Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/Pasture Industrial			Grasses Herbaceous		
****		Agricult		tial	_		
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft ✓ Moderate 15-30ft		
		Canopy Cover		Narrow <16ft			
		Partly open Partly shaded		aded	Wetland PresentYes	✓ No	
		ShadedOpen		Wetland ID	- 140		
					dominant species present		
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae					
		Attached algae					

	Perennial stream with pronounced downcutting. The landowner said the government is working on stream restoration here. Many trees have been planted adjacent to the stream.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed
OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction SSW

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/10/2019

STREAM ID S-GH36			STREAM NA	STREAM NAME UNT Foul Ground Creek				
CLIENT MVP				PROJECT NAME MVP				
LAT 37.031187 LONG -79.778447				DATE 05/25/2016 COUNTY Franklin				
INVESTIGATO	INVESTIGATORS K. Larsen, D. McCullough, L.							
WATER TYPE TNW RPW NRPW NRPW			FLOW REG Perennial	FLOW REGIME				
				-	<u> </u>			
		Vidth: <u>8.0</u> ft Height: RB <u>5.0</u> 1.00 in 1.0 ft Water Mark (Width): Water Mark (Height)	8.0 ft RB5.0 ft 0 in ft er Mark (Width):3.0 ft er Mark (Height):12.0 in		Sinuosity Low Medium High Gradient Flat Moderate Severe (0.5/100 ft)			
FLOW CHARACTERISTICS No wate Stream Strandin Flowing Velocity Fast		Stream bed Standing w Flowing war	r, stream bed dry ned moist g water		Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle % Run % Pool % Turbidity Clear Slightly turbid Turbid Other			
INOR	INORGANIC SUBSTRATE COMPON (should add up to 100%)				ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	te Cha	racteristic	% Composition in Sampling Area	
Bedrock				Detritus		ks, wood, coarse		
Boulder		56 mm (10")		2 30100	plant	materials (CPOM)	40	
Cobble		mm (2.5"-10")		Muck-Muc	black, very fine organic			
Gravel		mm (0.1"-2.5")	5			(FPOM)		
Sand		-2mm (gritty)	10					
Silt		4-0.06 mm	75	Marl	grey, shell fragments			
Predominant Surre		al Residentia Other:	al I	Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft				
MACROINVERTERRATECIOTHER WILDLIFF ORGERVER OR OTHER MOTES AND ORGERVATIONS								
MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS								
Intermittent stream starting from seep under tree roots.								



Photograph Direction SW

STREAM ID S-KL17			STREAM N	STREAM NAME UNT to Foul Ground Creek			
CLIENT MVP				PROJECT NAME MVP			
LAT 37.03096		ONG -79.77845		DATE 05/25/2016 COUNTY Franklin			
INVESTIGATO	ORS E. Fo	oster, J. Cook, K.	Pulver				
WATER TYPE TNW RPW NRPW NRPW			FLOW REG	Intermi	ittent 🔽	Ephemeral	
CHANNEL FE	ATURES	Top of Bank H LB 3.0 ft Water Depth: Water Width: Ordinary High	Vidth:	: <u>5.0</u> ft	Gradient (Stream ENor Artificial,Yes Within RoYes Culvert P	Flat Mo 0.5/100 ft) (2 ft/ rosion ne Moderate Modified or Chann oadside Ditch s Yes aterial:	100 ft) (10 ft/100 ft) ✓ Heavy nelized ✓ No
FLOW CHARACTER	FLOW CHARACTERISTICS Water Present No water, stream Stream bed moist Standing water Flowing water Velocity Fast Slow Slow				Proportio Morpholo Riffle 30 Pool 10 Turbidity Clear) %	er if water present) %
INOR		UBSTRATE COI				SUBSTRATE COM necessarily add uj	-
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	te Cha	aracteristic	% Composition in Sampling Area
Bedrock				Detritus		ks, wood, coarse	
Boulder		56 mm (10")		Detitius	plant	materials (CPOM)	10
Cobble	64-256	6 mm (2.5"-10")	20	Muck-Muc	black	k, very fine organic	
Gravel		nm (0.1"-2.5")	30	Widok Wido	"	(FPOM)	
Sand	0.06	-2mm (gritty)	30				
Silt		04-0.06 mm	20	Marl	grey	, shell fragments	
Clay < 0.004 mm (slick) Predominant Surre Forest Field/Pasture Agricultural ROW Canopy Cover Open Shaded			Residentia Other:	al I	Floodplai Wide > V Narrov	> 30ft Modera	nte 15-30ft
<u> </u>							
MAC	ROINVER	TEBRATES/OT	HER WILDLIFE OB	SERVED OR	OTHER N	OTES AND OBSER	RVATIONS
No culvert. Stre	eam modif	ied by channeliza	ation.				



Photograph Direction North

			1					
STREAM ID S-GH37			STREAM N	STREAM NAME UNT to Foul Ground Creek				
CLIENT MVP				PROJECT NAME MVP				
LAT 37.0310	68 <u>L</u>	ONG -79.77806	5 DATE 05/25	5/2016	COUNTY Franklin			
INVESTIGATO	ORS K. La	arsen, D. McCull	ough, L. Sexton					
WATER TYPE	RPW [NRPW	FLOW REG Perennial	Intermi	ittent Ephemeral			
CHANNEL FE	ATURES	Top of Bank H LB1.0 fl Water Depth: Water Width:_ Ordinary High	Vidth:ft Height: t	: <u>3.0</u> ft	Sinuosity Low Mo Gradient Flat Mo (2 ft/ Stream Erosion Moderate Artificial, Modified or Change Yes No Within Roadside Ditch Yes No Culvert Present Yes Culvert Material: Culvert Size: in	Heavy Heavy Heavy Melized		
Water PresentNo water, streamStream bed moisStanding water✓Flowing water VelocityFastMod _✓Slow			stream bed dry d moist vater	Riffle 10 % Run 70 % Pool 20 % Turbidity Clear Others				
INOR	-	UBSTRATE CO			ORGANIC SUBSTRATE COM (does not necessarily add u			
Substrate Type	Dia	meter	% Composition in Sampling Reach		Characteristic	% Composition in Sampling Area		
Bedrock				Detritus	sticks, wood, coarse			
Boulder		56 mm (10")			plant materials (CPOM)	30		
Cobble		6 mm (2.5"-10")	35	Muck-Muc	black, very fine organic (FPOM)			
Gravel		nm (0.1"-2.5")	50		(FPOINI)			
Sand		-2mm (gritty)	10	Morl	arov shall fragments			
Silt Clay		04-0.06 mm 04 mm (slick)	5	Marl	grey, shell fragments			
Predominant Surro ✓ Forest — Field/Pasture — Agricultural — ROW Canopy Cover — Open ✓ Shaded			al Residentia Other:	al ıl	Floodplain Width Wide > 30ft Modera Narrow <15ft	ate 15-30ft		
MAC		TERRATERIOT	HED WILDLIEE OR	SEDVED OF	OTHER NOTES AND ORSE	PVATIONS		
MAC	KUINVER	IEBKATES/UT	HER WILDLIFE OB	SEKVED OR	OTHER NOTES AND OBSER	CATIONS		
Intermittent stream starting from seep. Flows into S-GH36 outside of corridor. Wetland W-GH14 is on right bank.								



Photograph Direction <u>SW</u>

Top of Bank Height: LB1.0ft	STREAM ID S-GH38			STREAM NAME UNT to Foul Ground Creek					
LAT 37.031084 LONG -79.777959 DATE 05/25/2015 COUNTY Franklin	CLIENT MVP			PROJECT NAME MVP					
Stimate Measurements				59					
RPW NRPW Perennial Intermittent Ephemeral	INVESTIGATORS K. Larsen, D. McCullough, L				Sexton				
Top of Bank Width: _5.0 _ ft Top of Bank Weight: LB _1.0 _ ft RB _1.0 _ ft Water Depth: _1.00 _ in Water Width: _2.0 _ ft Ordinary High Water Mark (Width): _3.0 _ ft Ordinary High Water Mark (Width	WATER TYPE TNW RPW NRPW					IME Interm	nittent 🔽	Ephemeral	
FLOW CHARACTERISTICS — No water, stream bed dry Stream bed moist Stream Stream Stream Stream Stream Stream bed moist Stream Str	CHANNEL FE	Top of Bank Width: Top of Bank Height LB1.0 ft Water Depth:1.0 Water Width:2.0 Ordinary High Wate Ordinary High Wate				Stream Erosion			derate Severe (10 ft/100 ft) Heavy nelized
Canopy CoverOpenPartly shaded Characteristic Characteristic Canopy CoverOpenPartly shaded Partly shade		No water, stream Stream bed mois Standing water Flowing water Velocity Fast Moo			Morphology Types (Only enter if water present Riffle 10 % Run 90 % Pool % Turbidity ClearSlightly turbidTurbidity				er if water present) %
Type Diameter Sampling Reach Type Characteristic Sampling Area Bedrock Detritus Sticks, wood, coarse plant materials (CPOM) 20 Cobble 64-256 mm (2.5"-10") 5 Muck-Mud Diack, very fine organic (FPOM) Sand 0.06-2mm (gritty) 60 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Floodplain Width Wide > 30ft Moderate 15-30ft Forest Commercial Moderate 15-30ft Marrow <15ft WATERSHED FEATURES Partly shaded Partly shaded Shaded WACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at	INOR				_				
Boulder > 256 mm (10") Detritus plant materials (CPOM) 20 Cobble 64-256 mm (2.5"-10") 5 Muck-Mud Detritus Detritus plant materials (CPOM) 20 Cobble 64-256 mm (2.5"-10") 5 Muck-Mud Detritus Detritus Detritus plant materials (CPOM) 20 Boulder 2.5" mm (2.5"-10") 5 Muck-Mud Detritus Detritus Detritus Detritus Plant materials (CPOM) 20 Boulder 2.5" mm (2.5"-10") 5 Muck-Mud Detritus Detrit	_	Dia	meter				i (:na	racteristic	% Composition in Sampling Area
Cobble 64-256 mm (2.5"-10") 5						Detritus			
Gravel 2-64 mm (0.1"-2.5") 30 Muck-Mud (FPOM) Sand 0.06-2mm (gritty) 60 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other: Canopy Cover Open Partly shaded Silt Narrow <15ft Marl grey, shell fragments Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at			. ,				plant	materials (CPOM)	20
Sand 0.06-2mm (gritty) 60 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other: Canopy Cover Open Partly shaded Silt Surrounding Landuse Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft Marl grey, shell fragments Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft Macroinvertess Partly shaded Shaded MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at			,			Muck-Mu			
Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Floodplain Width Wide > 30ft Narrow <15ft MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at								(FPOIVI)	
Clay < 0.004 mm (slick) Predominant Surrounding Landuse Floodplain Width Wide > 30ft Wide > 30ft Narrow <15ft Agricultural ROW Other: Canopy Cover Open Shaded MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at)	Maul		, aball for our sucts	
Predominant Surrounding Landuse ✓ Forest Commercial Wide > 30ft Moderate 15-30ft — Field/Pasture Industrial Narrow <15ft — Agricultural Residential Other: Canopy Cover Open Partly shaded ✓ Shaded MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at				5		Mari	grey	, snell fragments	
Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at	Predominant Surro ✓ Forest — Field/Pasture — Agricultural — ROW Canopy Cover — Open			ture _ al _	Commercia Industrial Residential Other:	al	Wide >	30ft Modera	L ate 15-30ft
Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at			_						
Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at	MAC	DOINVED	TERDATES/OT	HED W	III DI IEE OBS	EDVED OF	OTUED N	OTES AND OBSER	PVATIONS
	Intermittent stre	Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at							



Photograph Direction SW

STREAM ID S-GH39			STREAM NA	STREAM NAME UNT to Foul Ground Creek			
CLIENT MVP			PROJECT N	PROJECT NAME MVP			
LAT 37.030868 LONG -79.778138			DATE 05/25/	DATE 05/25/2016 COUNTY Franklin			
INVESTIGATO	ORS K. La	rsen, D. McCullo	ough, L. Sexton				
WATER TYPE TNW RPW NRPW NRPW			FLOW REG Perennial		ttent F Ephemeral		
		Estimate Mea	suromonts		Sinuosity Low 🗸	Medium High	
			/idth: <u>12.0</u> ft eight:	ft	Gradient Flat <u>✓</u> Mo	derate Severe (100 ft) (10 ft/100 ft)	
		Water Depth: _	2.00 in		<u>✓ None</u> Moderate	Heavy	
		Water Width:	3.0 ft		Artificial, Modified or Chani	nelized	
CHANNEL FE	ATURES	_	Water Mark (Width):	4.0 ft	Yes <u>✓</u> No	1	
			Water Mark (Height)		Within Roadside Ditch		
		, ,	` ,	0.0_ 111	Yes <u>✓</u> No	1	
		Flow Direction:	Normeasi	_	Culvert PresentYes	✓ No	
					Culvert Material:		
					Culvert Size: in		
		Water Presen	t		Proportion of Reach Repres	sented by Stream	
		No water, stream bed dryStream bed moistStanding water			Morphology Types (Only ente	er if water present)	
					Riffle 10 % Run 90 %		
FLOW					Pool %		
CHARACTER	ISTICS	<u>✓</u> Flowing wat	er		Turbidity		
		Velocity			✓ ClearSlightly turbidTurbidOther		
			. Moderate				
		<u></u> ✓ Slow					
INOR	-	JBSTRATE COM d add up to 100			ORGANIC SUBSTRATE COM (does not necessarily add u		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrate Type	e Characteristic	% Composition in Sampling Area	
Bedrock			· · ·		sticks, wood, coarse		
Boulder	> 2!	56 mm (10")		Detritus	plant materials (CPOM)	30	
Cobble	64-256	mm (2.5"-10")	5	NA I. NA I	black, very fine organic		
Gravel	2-64 r	nm (0.1"-2.5")	20	Muck-Mud	(FPOM)		
Sand	0.06	-2mm (gritty)	50				
Silt	0.00	4-0.06 mm	25	Marl	grey, shell fragments		
Clay	< 0.00	04 mm (slick)		Ī	1	İ	
WATERSHED FEATURES WATERSHED FEATURES Predominant Surro ✓ Forest — Field/Pasture — Agricultural — ROW Canopy Cover — Open ✓ Shaded							
		Predominant Forest Field/Pastu Agricultura ROW Canopy Cove Open	Residential Other:	al	Floodplain Width Wide > 30ft Narrow <15ft Wodera	l ate 15-30ft	
		Predominant Forest Field/Pastu Agricultura ROW Canopy Cove Open	Commercia ure Industrial Residential Other:	al	Wide > 30ft Modera	ate 15-30ft	
FEATURES		Predominant Forest Field/Pastu Agricultura ROW Canopy Cove Open Shaded	Commercia Industrial I Residential Other: Partly shade	ed	Wide > 30ft Modera		
FEATURES	ROINVER f intermitte	Predominant Forest Field/Pastu Agricultura ROW Canopy Cove Open Shaded	Commercia Industrial I Residential Other: Partly shade	ed SERVED OR	Wide > 30ft Modera	RVATIONS	



Photograph Direction NE

STREAM ID S-GH40			STREAM NA	STREAM NAME UNT to Foul Ground Creek			
CLIENT MVP			PROJECT N	PROJECT NAME MVP			
LAT 37.029265 LONG -79.774628			28 DATE 05/25/	/2016	COUNTY	Franklin	
INVESTIGATORS K. Larsen, D. McCullough, L			ough, L. Sexton				
WATER TYPE TNW RPW NRPW			FLOW REG Perennial	IME Intermiti	tent Ep	nemeral 🗸	
		Estimate Mea	asurements		Sinuosity 🗸	Low N	Medium High
Top of B Top of B			Top of Bank Width: 8.0 ft Top of Bank Height: LB 3.0 ft RB 3.0 ft			Gradient Flat ✓ Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)	
		Water Depth:			Stream Erosion None	ı <u>✔ </u> Moderate	Heavy
		l			Artificial, Modif		
CHANNEL FE	ATURES	Water Width:			Yes	✓ No	ielizeu
		, ,	n Water Mark (Width):		— Within Roadsid	_	
		Ordinary High	n Water Mark (Height)	: <u>6.0</u> in	Yes Yes	e Ditch <u>✓</u> No	
		Flow Direction	n: Northeast	_	Culvert Present	_	No
							
					Culvert Material:		
				-	Culvert Size:		
		Water Preser No water, s Stream bed Standing v	stream bed dry d moist			oes (Only enter	ented by Stream r if water present) %
FLOW CHARACTER	ISTICS	Standing water					
CHARACTER	131103	_			Turbidity ClearSlightly turbidTurbid Other		
		Velocity	Madayata				
		Fast Slow	_ Moderate		_		
INOR	_	JBSTRATE CO	-	_	ORGANIC SUBS does not neces		
Substrate Type	(shou		-	_	does not neces	sarily add up	to 100%)
Substrate	(shou	d add up to 10	0%) 100 % Composition in	Substrate Type	does not neces Character	sarily add up	% Composition in
Substrate Type	(should Dia	d add up to 10	0%) 100 % Composition in	Substrate	does not neces Character sticks, wo	sarily add up	% Composition in
Substrate Type Bedrock	(shoul	d add up to 10	0%) 100 % Composition in	Substrate Type Detritus	Character sticks, wo plant mater black, very	sarily add up istic od, coarse ials (CPOM) fine organic	% Composition in Sampling Area
Substrate Type Bedrock Boulder	Dia > 25	d add up to 10 meter	0%) 100 % Composition in Sampling Reach	Substrate Type	Character sticks, wo plant mater black, very	sarily add up istic od, coarse ials (CPOM)	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble	Shoul Dia	meter 66 mm (10") mmm (2.5"-10")	9%) 100 % Composition in Sampling Reach	Substrate Type Detritus	Character sticks, wo plant mater black, very (FP	sarily add up istic od, coarse ials (CPOM) fine organic OM)	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Dia	meter 66 mm (10") mmm (2.5"-10") mm (0.1"-2.5")	% Composition in Sampling Reach 5 25	Substrate Type Detritus	Character sticks, wo plant mater black, very (FP	sarily add up istic od, coarse ials (CPOM) fine organic	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shoul Dia	d add up to 10 meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm	% Composition in Sampling Reach 5 25 15 50 5	Substrate Type Detritus Muck-Mud Marl	Character sticks, wo plant mater black, very (FP) grey, shell	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Should Dia	d add up to 10 meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm	% Composition in Sampling Reach 5 25 15 50 5 t Surrounding LandutureIndustrial	Substrate Type Detritus Muck-Mud Marl	Character sticks, wo plant mater black, very (FP	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments thModerat	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Should Dia	d add up to 10 meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick) Predominant ✓ Forest — Field/Past — Agricultura	% Composition in Sampling Reach 5 25 15 50 5 t Surrounding Landuture Industrial Residential Other:	Substrate Type Detritus Muck-Mud Marl	Character sticks, wo plant mater black, very (FP grey, shell Wide > 30ft	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments thModerat	% Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Should Dia	meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove	% Composition in Sampling Reach 5 25 15 50 5 Surrounding Landu — Commercia Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl	Character sticks, wo plant mater black, very (FP grey, shell Wide > 30ft	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments thModerat	% 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") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 5 25 15 50 5 Surrounding Landu — Commercia Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl	character sticks, wo plant mater black, very (FP grey, shell Wide > 30ft V Narrow <15f	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments th Moderat	% Composition in Sampling Area 30
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	(should be	meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick) Predominant Forest Field/Past Agriculture ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 5 25 15 50 5 Surrounding Landu — Commercia Industrial — Residential — Other: er — Partly shad	Substrate Type Detritus Muck-Mud Marl	character sticks, wo plant mater black, very (FP grey, shell Wide > 30ft V Narrow <15f	sarily add up istic od, coarse ials (CPOM) fine organic OM) fragments th Moderat	% Composition in Sampling Area 30



Photograph Direction SW

STREAM ID S-GH44			STREAM NA	STREAM NAME UNT to Foul Ground Creek			
CLIENT MVP				PROJECT NAME MVP			
LAT 37.028527 LONG -79.773483					cou	JNTY Franklin	
		arsen, D. McCullo			-		
WATER TYPE			FLOW REGI Perennial		ittent	Ephemeral	
CHANNEL FE	ATURES	Top of Bank H LB <u>2.0</u> ft Water Depth: Water Width: Ordinary High	Vidth:8.0ft leight:	6.0ft	Gradient (() Stream EnNon Artificial,Yes Within RoYes Culvert Po	FlatMo 0.5/100 ft) (2 ft/ rosion theModerate Modified or ChannNo padside Ditch	relized <u>✓</u> No
Water Present No water, streamStream bed moistStanding water Flowing water VelocityFastModeSlow			tream bed dry moist rater		Morpholog Riffle 20 Pool 10 Turbidity	Slightly to	r if water present) %
INOR	-	UBSTRATE CON				SUBSTRATE COM necessarily add uj	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	te Cha	racteristic	% Composition in Sampling Area
Bedrock	. 0	-0 (1011)		Detritus		ks, wood, coarse materials (CPOM)	
Boulder Cobble		56 mm (10") 6 mm (2.5"-10")	- 10	 	+ -		30
Gravel		mm (0.1"-2.5")	10 20	Muck-Muc	d black	, very fine organic (FPOM)	
Sand		-2mm (gritty)	60			(,	
Silt		04-0.06 mm	10	Marl	grev	, shell fragments	
Clay		04 mm (slick)	10		3,	,	
WATERSHED FEATURES Predominant Surrou Forest Field/Pasture Agricultural ROW Canopy Cover Open Shaded			Commercia ure Industrial	al	Floodplain Wide >	30ft Modera	te 15-30ft
		Open	e r Partly shade	ed			
		Open		ed			
FEATURES	ROINVER	Open <u>✓</u> Shaded			R OTHER NO	OTES AND OBSER	EVATIONS
FEATURES		Open <u>✓</u> Shaded	Partly shade		OTHER NO	OTES AND OBSER	EVATIONS



Photograph Direction South

STREAM ID S-G22	STREAM NAME UNT to Poplar Camp Creek
LAT 37.019567 LONG -79.762041	DATE 04/03/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS G. Stevens, A. Rodrian, S. H	Kelly
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

i elelililai =	intermitte	пі— Ерпепі	tial— IIVV —	10.77	MICE W		
			leasurements k Width: 12 ft		Stream Erosion None Moderate	Heavy	
CHANNEL FEATURES		Top of Bank Height:			Artificial, Modified or Char	-	
		LB 4.0	ft RB <u>4.0</u>	<u>ft</u>	Yes ✓ No	illelizeu	
		Water Dept	h: <u>6.00 in</u> h: 3.0 ft		Dam Present Yes	<u>∕</u> No	
			Mark: 4.0 ft		Sinuosity Low	Medium High	
		Flow Direct	ion: East		Gradient		
					✓ FlatModerate _	Severe (10 ft/100 ft)	
FLOW CHARACTER	ISTICS	Water Present No water, stream bed dry Stream bed moist Standing water Flowing water Velocity			Proportion of Reach Representations of Reach R	%	
			✓ Moderate		OpaqueStainedOther		
INOR		STRATE CO		ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock			20	Detritus	sticks, wood, coarse		
Boulder		mm (10")	10	Dountao	plant materials (CPOM)	45	
Cobble	64-256 m	ım (2.5"-10")	40	Muck-Mud	black, very fine organic		
Gravel		า (0.1"-2.5")	15		(FPOM)		
Sand		nm (gritty)	10				
Silt		0.06 mm	_	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	5	.1	In all a set of the order of the section of the sec	(2)	
WATERSHED FEATURES WATERSHED Ganopy C Partly of		Forest Field/Pa Agricult	Residential Diver Dippen Partly shaded		Indicate the dominant type I Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Narrow <16ft Wetland Present Yes Wetland ID	ceous	
AQUATIC VE	GETATION		emergent	d record the or Rooted submark Attached alga	_	ingFree floating	
		<u>-</u>					
		Information	listed on this form re	presents the c	data collected in 2015. The sti	eam was revisited	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction West

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 11/10/2019

STREAM ID S-G23	STREAM NAME UNT to Poplar Camp Creek
LAT 37.01941 LONG -79.761976	DATE 04/03/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS G. Stevens, A. Rodrian, S. k	Kelly
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

	Estimate Measurements				Stream Erosion		
		· '	k Width: 3 ft		NoneModerate	Heavy	
		Top of Ban		_	Artificial, Modified or Char	nnelized	
		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	Yes No		
CHANNEL FE	ATURES	Water Dept	th: 1.00 in		Dam PresentYes _	∠ No	
		Water Widt	h: <u>1.0 ft</u>				
		High Water	Mark: 2.0 ft		Sinuosity <u>v</u> Low	Medium High	
		Flow Direct	tion: North		Gradient		
					Flat Moderate (2 ft/100 ft)		
		Water Pres	sent		Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types Riffle 20 % Run 80	%	
		Standing	oed moist n water		Pool %	70	
FLOW CHARACTER	ISTICS	Flowing	•				
OHARAGIER	101100				Turbidity <u>✓</u> ClearSlightly	turbidTurbid	
		Velocity Fast	Moderate		<u>✓ Clear</u> Slightly turbidTurb OpaqueStained		
		✓ Slow	Woderate		Other		
INORGANIC SUBSTRATE COMP			MPONENTS	0	RGANIC SUBSTRATE COM	/IPONENTS	
	(should	add up to 10	0%)	(does not necessarily add up to 100%)			
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock			20	Detritus	sticks, wood, coarse		
Boulder	> 256	mm (10")	40	Detritus	plant materials (CPOM)	90	
Cobble	64-256 m	m (2.5"-10")	20	Muck-Mud	black, very fine organic		
Gravel	2-64 mm	າ (0.1"-2.5")	5		(FPOM)		
Sand		nm (gritty)	15				
Silt		0.06 mm		Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)					
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/Pa				iceous	
MATEROUER		Agricult	ural Resident	tial	Floodalain Width		
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft	
		Canopy Co	over		Narrow <16ft		
		Partly c	penPartly sh	aded	Wetland Present Yes	✓ No	
		<u></u> ✓ Shaded	Open		Wetland ID	<u> </u>	
					dominant species present		
AQUATIC VE	GETATION			Rooted submentage Attached alga	ergentRooted float	tingFree floating	
		rioating	<u></u>	Allacheu alga	<u> </u>		

MACROINVERTEBRATES OR OTHER	Flows into SG22 Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed
WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction West

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 11/10/2019

STREAM ID S-G21	STREAM NAME UNT to Poplar Camp Creek		
LAT 37.019445 LONG -79.761664	DATE 04/03/2015		
CLIENT MVP	PROJECT NAME MVP		
INVESTIGATORS G. Stevens, A. Rodrian, S. Kelly			
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW		

		T										
CHANNEL FEATURES		Estimate Measurements			Stream Erosion							
		Top of Ban			None Moderate	пеаvy						
		Top of Ban		• _	Artificial, Modified or Char	nnelized						
		LB <u>6.0</u>		<u>in</u>	Yes No							
			h: 1.00 in		Dam PresentYes _	<u>∕</u> No						
		Water Width: 1.0 ft			Sinuosity <u>v</u> Low	Medium High						
		High Water Mark: 1.0 ft Flow Direction: North				<u> </u>						
		Flow Direct	1011. <u>140141</u>		Gradient Flat Moderate _	✓ Severe						
						(10 ft/100 ft)						
		Water Present			Proportion of Reach Represented by Stream							
		No water, stream bed dry Stream bed moist			Morphology Types Riffle 5 % Run 90 %							
		Standing			Pool 5 %	,0						
FLOW CHARACTER	ISTICS	l — `	✓ Flowing water									
		<u> </u>			Turbidity <u>✓</u> ClearSlightly turbidTurbid							
		VelocityFast✓ Moderate Slow			OpaqueStainedTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbidTurbid							
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS												
	(should	add up to 100			does not necessarily add u							
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area						
Bedrock				Detritus	sticks, wood, coarse							
Boulder		mm (10")		Detrituo	plant materials (CPOM)							
Cobble		m (2.5"-10")		Muck-Mud	black, very fine organic							
Gravel		า (0.1"-2.5")			(FPOM)							
Sand		nm (gritty)	80									
Silt		0.06 mm		Marl	grey, shell fragments							
Clay	< 0.004	mm (slick)	20									
Predominant Surrounding Landuse Indicate the dominant type (Check one) Forest Commercial Trees Shrubs												
WATERSHED FEATURES C		Field/Pasture Industrial Agricultural Residential Other:			✓ Grasses — Herbaceous							
					Floodplain Width Wide > 30ft Moderate 15-30ft							
							Canopy Cover Partly open Shaded Open		✓ Narrow <16ft Wetland Present ✓ Yes Wetland ID W-B11			
		AQUATIC VEGETATION									dominant species present	
				Rooted emergent								
				— Floating	<u></u>	nilaulieu aiga	<u> </u>					

	Hillside stream flows into SG22
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 11/10/2019. The presence of a stream channel and OHWM was confirmed



Photograph Direction North

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/10/2019

STREAM ID S-G20	STREAM NAME Poplar Camp Creek		
LAT 37.017404 LONG -79.759961	DATE 04/03/2015		
CLIENT MVP	PROJECT NAME MVP		
INVESTIGATORS G. Stevens, A. Rodrian, S. Kelly			
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW — RPW ✓ NRPW —		

		Estimate Measurements			Stream Erosion	
		'	k Width: 10 ft		None Moderate	Heavy
		Top of Bank		•	Artificial, Modified or Char	nnelized
		LB <u>3.0</u>		<u>ft</u>	YesNo	
CHANNEL FE	ATURES		h: 1.00 ft		Dam PresentYes _	<u>∠</u> No
		Water Widt			Sinuosity <u>v</u> Low	Medium High
		High Water Mark: 8.0 ft				
		Flow Direct	ion: Northeast		Gradient Madarata	Covers
						Severe (10 ft/100 ft)
		Water Pres			Proportion of Reach Represented by Stream	
			r, stream bed dry		Morphology Types Riffle 40 % Run 30 %	
		Stream of Standing	ped moist		Pool 30 %	70
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing			7	
CHARACTER	131103	- rowing water		Turbidity	Accepted Translated	
		Velocity			<u>✓</u> ClearSlightly turbidTurbid OpaqueStained	
		<u>✓</u> Fast . Slow	Moderate		— Other	
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS						
	(should 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			20	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	20	Detilius	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	10	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	ı (0.1"-2.5")	20	Widok Widd	(FPOM)	
Sand		nm (gritty)	20	Marl		
Silt		0.06 mm			grey, shell fragments	
Clay	< 0.004	mm (slick)	10			
		Predomina ✓ Forest	nnt Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
WATERSHED FEATURES Cano		Field/Pasture Industrial			Grasses Herbaceous	
		AgriculturalResidentialOther:			_	
				Floodplain Width Wide > 30ft Moderate 15-30ft		
		Canopy CoverPartly open ✓ Partly shaded		Narrow <16ft		
		Shaded	ShadedOpen		Wetland PresentYes ✓ No Wetland ID	
					dominant species present	
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating				
Floating algaeAttached algae						

	Fish
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 11/10/2019. The presence of a stream channel and OHWM was confirmed

Stream ID S-G20



Photograph Direction SSW

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction NNE

Date: 11/10/2019