STREAM ID	S_ST18		0705444	STREAM NAME UNT to Mobley Run			
CLIENT MVF	5						
LAT 39.5623	97	ONG ^{-80.540519}	PROJECT NA	PROJECT NAME MVP DATE 04/12/2016 COUNTY Wetzel			
			DATE OF TELL		COUNTY Weizer		
INVESTIGATORS JMM AJM CS WATER TYPE FLOW REGIME							
TNW		NRPW	Perennial P	IME Intermi	ttent F Ephemeral		
CHANNEL FE	ATURES	Water Depth: 9 Water Width: 9 Ordinary High	Vidth: 10.0 ft Height: RB2.0 ft 3.00 in Water Mark (Width): Water Mark (Height)	Gradient Flat Moderate (2 ft/100 ft) Stream Erosion None Moderate Heavy Artificial, Modified or Channelized Yes No Within Roadside Ditch			
FLOW CHARACTER	ISTICS	Stream bed Standing w Flowing wat	tream bed dry I moist vater		Proportion of Reach Represe Morphology Types (Only enter Riffle 40 % Run 25 Pool 35 % Turbidity Clear Slightly to Other	er if water present) %	
INOR		UBSTRATE CON			ORGANIC SUBSTRATE COM (does not necessarily add u		
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")	20		plant materials (CPOM)	30	
Cobble		6 mm (2.5"-10")	40	Muck-Muc	black, very fine organic		
Gravel		nm (() 1"_2 5") ı		i maon mac			
Sand	2.00	nm (0.1"-2.5")	25	Wask Was	(FPOM)		
		-2mm (gritty)			(FPOM)		
Silt	0.00	-2mm (gritty) 04-0.06 mm	25 15	Marl			
	0.00	-2mm (gritty) 04-0.06 mm 04 mm (slick)	Surrounding Landu Commercia ure Industrial Residential Other:	Marl Ise	grey, shell fragments Floodplain Width	ate 15-30ft	
Silt Clay WATERSHED	0.00	-2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant Forest Field/Pasti Agricultura ROW Canopy Cove Open	Surrounding Landu Commercia ure Industrial Residential Other:	Marl Ise	grey, shell fragments Floodplain Width Wide > 30ft Modera	ate 15-30ft	
Silt Clay WATERSHED FEATURES	0.00 < 0.00	-2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant Forest Field/Pasti Agricultura ROW Canopy Cove Open Shaded	Surrounding Landu Commercia Industrial Residential Other: Partly shade	Marl Ise al	grey, shell fragments Floodplain Width Wide > 30ft Modera		



Photograph Direction North

CLIENT MVP	STREAM ID S-WX3				STREAM NAME UNT to Mobley Run				
LAT 39.560562									
RATERTYPE TWW Premnial Intermittent Ephemeral								OUNTY Wetzel	
RPW NRPW Perennial Intermittent Ephemeral	INVESTIGATO	ORS C. Vi	leno J. Bittner						
Top of Bank Width: _5.0 _ ft Top of Bank Height: LB _3.0 _ ft			NRPW			IME Interm	nittent 🔽	Ephemeral	
Top of Bank Width: _5.0 _ ft Top of Bank Height: LB _3.0 _ ft							ı		
FLOW CHARACTERISTICS Velocity	Top of Bank Width: Top of Bank Height LB3.0ft Water Depth:0.0 Water Width:0.0 Ordinary High Wate Ordinary High Wate			Vidth:5 Height: t	5.0 ft RB 3.0 ft in ft r Mark (Width): 3.0 ft r Mark (Height): 24.0 in		(0.5/100 ft) (2 ft/100 ft) (10 ft/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		
Substrate Type	FLOW CHARACTERISTICS Let No water, stream Stream bed mois Standing water Flowing water Velocity Fast Moo			stream bed d moist vater ster			Morpholo Riffle Pool Turbidity Clea	ogy Types (Only ente % Run % / / / Slightly to	er if water present) %
Type Diameter Sampling Reach Type Characteristic Sampling Area Bedrock Detritus Sticks, wood, coarse plant materials (CPOM) Cobble 64-256 mm (2.5"-10") 35 Muck-Mud Diack, very fine organic (FPOM) Sand 0.06-2mm (gritty) 15 Silt 0.004-0.06 mm 10 Marl grey, shell fragments Clay < 0.004 mm (slick) 10 Predominant Surrounding Landuse — Floodplain Width — Forest — Commercial — Wide > 30ft — Moderate 15-30ft — Narrow <15ft WATERSHED FEATURES WATERSHED FEATURES Canopy Cover — Other: Canopy Cover — Partly shaded — Shaded	INOR				NTS				-
Boulder > 256 mm (10")	_		-	% Cor			ate Ch	<u> </u>	% Composition in Sampling Area
Boulder > 256 mm (10")	Bedrock					Detritus			
Gravel 2-64 mm (0.1"-2.5") 30 Muck-Mud (FPOM)			` '			Dountas	plan	t materials (CPOM)	
Sand 0.06-2mm (gritty) 15			,	35		Muck-Mi	ıd blac		
Silt 0.004-0.06 mm 10 Marl grey, shell fragments Clay < 0.004 mm (slick) 10 Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other: Canopy Cover Open Partly shaded Shaded Marl grey, shell fragments Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft Canopy Cover Open Partly shaded						III GON IVIO		(FPOM)	
Clay < 0.004 mm (slick) 10 Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other: Canopy Cover Open Partly shaded Shaded Predominant Surrounding Landuse Wide > 30ft Moderate 15-30ft Wide > 30ft Moderate 15-30ft Wide > 30ft Moderate 15-30ft V Narrow < 15ft				15	;				
Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other: Canopy Cover Open Partly shaded Shaded Ploodplain Width Wide > 30ft Moderate 15-30ft Warrow <15ft V Narrow <15ft Partly shaded	-					Marl	gre	ey, shell fragments	
WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES Poper Partly shaded Shaded Narrow <15ft Narrow <15ft Narrow <15ft Partly shaded	Clay	< 0.00	Predominant	Surrour			Wide	> 30ft Modera	te 15-30ft
MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS	WATERSHED FEATURES Agricultural ROW Canopy Cover		al	_Industrial _ Residential _Other:	I	<u>✓</u> Narro	w <15ft		
MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS									
	MAC	ROINVER	TEBRATES/OT	HER WIL	DLIFE OBS	SERVED OI	R OTHER N	IOTES AND OBSER	RVATIONS



Photograph Direction NW

OTDERWIN O. A.								
STREAM ID S-A1a STREAM NAME North Fork Fishing Creek								
LAT 39.55393		IG -80.54501						
CLIENT MVP PROJECT NAME MVP								
INVESTIGATO	INVESTIGATORS ES CM MW DM							
TNW	RPW 🔽	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral			
					<u> </u>			
			/leasurements k Width: 35.0 ft		Stream Erosion None _ ✓ Moderate	Heavy		
		Top of Ban						
			9	4	Artificial, Modified or Char	nnelized		
			ft RB <u>5.0 f</u>	<u> </u>	Yes _ <u>✔</u> No			
CHANNEL FE	ATURES	·	th: 8.00 in		Dam PresentYes _	✓ No		
		Water Widt				_		
		Ordinary H	igh Water Mark (Widt	h): <u>35.0 ft</u>	Sinuosity Low	iviedium High		
		Ordinary H	igh Water Mark (Heig	ht): <u>5.0 ft</u>	Gradient			
		Flow Direct	tion: West			Severe (10 ft/100 ft)		
		Water Pres	cont		Proportion of Reach Repre	,		
			r, stream bed dry		Morphology Types	•		
		Stream I	bed moist		Riffle 20 % Run 10) %		
FLOW		Standin	•		Pool 70 %			
CHARACTER	ISTICS	Flowing water			Turbidity			
		Velocity			✓ ClearSlightly turbidTurbi			
		·	Moderate		OpaqueStained			
		<u>✓</u> Slow		1	Other			
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100 (does not necessarily add up to 100%)								
Substrate	`	•	% Composition in	Substrate	1	% Composition in		
Type	Diame	eter	Sampling Reach	Type	Characteristic	Sampling Area		
Bedrock				Detritus	sticks, wood, coarse			
Boulder	> 256	mm (10")		Dottituo	plant materials (CPOM)	30		
Cobble		m (2.5"-10")	30	Muck-Mud	black, very fine organic			
Gravel		1 (0.1"-2.5")	30		(FPOM)			
Sand	0.06-2n	nm (gritty)	40					
Silt	0.004-0	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/P			Grasses Herba			
		Agricult						
WATERSHED FEATURES		✓ Other:	north bank bordered l	oy road	Floodplain Width Wide > 30ft Mode	rate 15-30ft		
		Canopy Co	over		— Narrow <16ft	1410 10 0011		
		Open	✓ Partly sh	aded				
		Shaded	<u> </u>		Wetland Present <u>✓</u> Yes Wetland ID W-A1a	No		
Indicate the dominant type and record the dominant species present								
				ergent Rooted float	tingFree floating			
Floating algae Attached algae								
MACROINVER OR OTHER	RTEBRATES	5						
WILDLIFE	THE							
OBSERVED/C								
NOTES								



Photograph Direction <u>SW</u>

STREAM ID S	-A3a			STREAM NAME UNT to North Fork Fishing Creek				
LAT 39.55179	3 LON	IG -80.545727	DATE 10/18	DATE 10/18/2014				
CLIENT MVP			PROJECT N	AME MVP				
INVESTIGATORS ES CM MW DM								
WATER TYPE	_		FLOW REGI					
TNW	RPW 🗸	NRPW _	Perennial	Intermitte	ent			
			leasurements (Width: 9.0 ft		Stream ErosionNone✓ Moderate _	Heavy		
		i i			NONENOGGIAGE	ricavy		
		Top of Bank	=	rı.	Artificial, Modified or Chan	inelized		
		LB <u>2.0</u> fl		<u>t</u>	Yes _ <u>✓</u> No			
CHANNEL FE	ATURES	Water Depth	•		Dam PresentYes	✓ No		
		Water Width		- 6				
		, ,	gh Water Mark (Width	<i>,</i> ———	Sinuosity Low	Meaium nigri		
			gh Water Mark (Heigl	ht): <u>1.5 ft</u>	Gradient	_		
		Flow Directi	on: Northeast		— Flat _✓ Moderate	Severe (10 ft/100 ft)		
<u> </u>		Water Pres	ent		Proportion of Reach Repre	,		
			, stream bed dry		Morphology Types			
		Stream b			Riffle 50 % Run 25	5 %		
FLOW		Standing Flowing v	•		Pool 25 %			
CHARACTERI	STICS	Flowing water			Turbidity			
		Velocity			✓ ClearSlightly turbidTurbidTurbidStained			
		Fast ✓ Moderate Slow			OtherStained			
INOR	CANIC SUB	STRATE CON	ADONENTS	0	RGANIC SUBSTRATE COM	IDONENTS		
		add up to 100	-	_	does not necessarily add up	-		
Substrate	Diame	ter	% Composition in	Substrate	Characteristic	% Composition in		
Type			Sampling Reach	Туре		Sampling Area		
Bedrock	> 256	mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)	20		
Boulder Cobble		m (2.5"-10")	20		· · · · ·			
Gravel	ļ	n (0.1"-2.5")	20	Muck-Mud	black, very fine organic (FPOM)			
Sand	ļ	nm (gritty)	20		, ,			
Silt		0.06 mm	20	Marl	grey, shell fragments			
Clay	< 0.004 1	mm (slick)	20					
		Predomina	nt Surrounding Lan		Indicate the dominant type	I		
		<u>√</u> Forest	Commerc		✓ TreesShrubs			
		Field/Pa Agricultu			Grasses Herba	ceous		
WATERSHED	,	Other:		,iai	Floodplain Width			
FEATURES					Wide > 30ftModer ✓ Narrow <16ft	rate 15-30ft		
		Canopy Co	v er <u>√</u> Partly sha	adad	— Nanow Stoit			
		Shaded		aueu	Wetland PresentYes	<u></u> ✓ No		
					Wetland ID			
AQUATIC VE	GETATION			Rooted subme	dominant species present ergent Rooted floati	ingFree floating		
Floating alg		•	Attached alga		g <u>—</u> g			
		 						
		Information listed on this form represents the			lata collected in 2014. The str	ream was revisited		
					data collected in 2014. The str nnel and OHWM was confirm			
MACROINVER	₹TEBRATES	on 09/16/20						
OR OTHER WILDLIFE		on 09/16/20						
OR OTHER WILDLIFE OBSERVED/C	THER	on 09/16/20						
OR OTHER WILDLIFE	THER	on 09/16/20						

Stream ID S-A3a



Photograph Direction NE

Date: 10/18/2014

Comments: 2014 stream identification.



Photograph Direction <u>SW</u>

Date: 09/16/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-J66	STREAM NAME UNT to North Fork Fishing Creek
LAT 39.546793 LONG -80.543698	DATE 06/03/2015
PROJECT NAME MVP	CLIENT MVP
INVESTIGATORS Pete Johnson, Chris Weber,	Nate K
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ⊻ NRPW

Perenniai –	_ mermine	nt <u> </u>	erai INVV —	RPW —	NRPW —	
					O. F.:	
			/leasurements k Width: <u>3.0 ft</u>		Stream Erosion None Moderate	Незуу
		-			Woderate	ricavy
		Top of Ban	ŭ	_	Artificial, Modified or Char	nnelized
CHANNEL FEATURES		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	Yes No	
		Water Dep	th: <u>1.00 in</u>		Dam PresentYes _	4 No
		Water Widt	th: 2.0 ft		Dam Present res _	NO
		High Water	Mark: <u>1.0 ft</u>		Sinuosity 🗸 Low	Medium High
		Flow Direct	tion: NE		Gradient	
						Severe
					(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 35 % Run 20	%
		Standin	bed moist g water		Pool 45 %	70
FLOW CHARACTER	ISTICS	Flowing	-		10	
CHARACTER	131103	_			Turbidity	Accordant and Transferral
		Velocity	Madarata		✓ ClearSlightly— OpaqueStained	
		Fast ✓ Slow	Moderate		Other	
INOD			MOONENTO			4DONENTO
INOR		STRATE CO add up to 10			RGANIC SUBSTRATE COM does not necessarily add u	
Substrate	, Diama		% Composition in	Substrate		% Composition in
Type	Diame	eter	Sampling Reach	Type	Characteristic	Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	20	Detritus	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	า (0.1"-2.5")	20	Wack-Waa	(FPOM)	0
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	10			
			ant Surrounding Lar		Indicate the dominant type	
		— Forest	Commer		Trees Shrub	
		— Field/P Agricul			<u>✓</u> Grasses Herba	aceous
WATERSHED			Rural residential	uai	Floodplain Width	
FEATURES			riarai residentiai		Wide > 30ft ✓ Mode Narrow <16ft	rate 15-30ft
		Canopy Co			Narrow < 1610	
		Partly of Shaded	<u> </u>	aded	Wetland PresentYes	∠ No
			d <u>✓</u> Open		Wetland ID	
					dominant species present	
AQUATIC VE	GETATION		_	Rooted submer	<u> </u>	tingFree floating
		1 10atii1		Allacried alga	<u> </u>	
		ı				
MACDOINVE	OTEDDATES					
MACROINVER OR OTHER	KIEDKAIES					
WILDLIFE OBSERVED/C	THER					
OBSERVATIO						
NOTES						
		1				



Photograph Direction SW

F								
STREAM ID S-A5a STREAM NAME UNT to Fallen Timber Run								
LAT 39.53462	2 LON	IG -80.54161	5 DATE 10/19	9/2014				
CLIENT MVP PROJECT NAME MVP								
INVESTIGATO	INVESTIGATORS ES CM MW DM							
WATER TYPE			FLOW REG					
TNW	RPW 🔽	NRPW [Perennial _	Intermitte	ent 🗾 Ephemeral 🗌			
			/leasurements		Stream Erosion			
		Top of Ban	k Width: 4.0 ft		None Moderate	Heavy		
		Top of Ban	k Height:		Artificial, Modified or Char	nnelized		
		LB <u>1.0</u>	ft RB <u>1.0</u>	<u>'t</u>	Yes No			
CHANNEL FE	ATURES	Water Dep	th: <u>0.00 in</u>			. N.		
OHAMELTE	ATORLO	Water Widt	th: <u>0.0 ft</u>		Dam PresentYes _	<u>∕</u> No		
		Ordinary H	igh Water Mark (Widt	h): <u>4.0 ft</u>	Sinuosity 🔽 Low	Medium High		
		Ordinary H	igh Water Mark (Heig	ht): 1.0 ft	Gradient			
		Flow Direct	tion: Southwest	,	Flat Moderate _	Severe		
					(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 bed moist		Morphology Types Riffle % Run	%		
		—Standin			Pool %			
FLOW CHARACTERI	STICS	Flowing	water		Total Cities			
		Volocity			TurbidityClearSlightly turbidTurb			
		Velocity Fast	Moderate		Opaque Stained			
		Slow			Other			
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	//PONENTS		
	(should add up to 100%) 100 (does not necessarily add up to 100%)				p to 100%)			
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area		
Bedrock			Sampling Reach	Туре	atials wood accres	Sampling Area		
Boulder	> 256	mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)	20		
Cobble		m (2.5"-10")	20		black, very fine organic			
Gravel		1 (0.1"-2.5")	20	Muck-Mud	(FPOM)			
Sand		nm (gritty)	20					
Silt		0.06 mm	20	Marl	grey, shell fragments			
Clay	< 0.004	mm (slick)	20					
-		Predomina	ant Surrounding Lan	duse	Indicate the dominant type	9		
		✓ Forest	Commer		✓ Trees Shrub			
		Field/P			Grasses Herba	aceous		
WATERSHED		Agriculi Other:	tural Resident	liai	Floodplain Width			
FEATURES		00			Wide > 30ftMode ✓ Narrow <16ft	rate 15-30ft		
		Canopy Co			Narrow <16ft			
		Open <u></u> ✓Shaded	Partly sh	aded	Wetland PresentYes	<u></u> ∨ No		
		<u>v</u> Shaded			Wetland ID			
Indicate the dominant type and record the dominant species present				ting Frontlanting				
AQUATIC VEGETATION Rooted emergent Rooted submergent Rooted f					tingFree floating			
				, maono a aiga				
MACROINVER	RTEBRATES	;						
OR OTHER WILDLIFE								
OBSERVED/C								
OBSERVATIO NOTES	MA GNI							



Photograph Direction South

OTDEAN NAME TO BE DOWN								
	STREAM ID S-A6a STREAM NAME Fallen Timber Run							
LAT 39.53340	9 LON	G -80.54124						
CLIENT MVP PROJECT NAME MVP								
INVESTIGATO	INVESTIGATORS ES CM MW DM							
TNW	RPW 🔽	NRPW [FLOW REG	IME Intermitte	ent Ephemeral			
			/leasurements k Width: <u>20.0 ft</u>		Stream Erosion None _ ✓ Moderate	Heavy		
		Top of Ban						
		•	9	4	Artificial, Modified or Char	nnelized		
			ft RB <u>3.0 f</u>	<u>ı</u>	Yes No			
CHANNEL FE	ATURES		th: 3.00 in		Dam PresentYes _	✓ No		
		Water Widt	th: 4.0 ft			_		
		Ordinary H	igh Water Mark (Widt	h): <u>20.0 ft</u>	Sinuosity Low	Medium High		
		Ordinary H	igh Water Mark (Heig	ht): <u>3.0 ft</u>	Gradient			
		Flow Direct	tion: Southwest		✓ Flat Moderate (2 ft/100 ft)	Severe		
		Water Pres			, ,	(10 ft/100 ft)		
			r, stream bed dry		Proportion of Reach Repre Morphology Types	senied by Stream		
			bed moist		Riffle 10 % Run	%		
FLOW		Standin			Pool 60 %			
CHARACTERI	STICS	Flowing	water		Turbidity			
		Velocity			✓ ClearSlightly turbidTurbit			
		•	Moderate		OpaqueStained			
		<u></u> ✓ Slow			Other			
INOR	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100 ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)							
Substrate	•	•	% Composition in	Substrate		% Composition in		
Type	Diame	ter	Sampling Reach	Type	Characteristic	Sampling Area		
Bedrock				Detritus	sticks, wood, coarse			
Boulder	> 256	mm (10")		Dottituo	plant materials (CPOM)	20		
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic			
Gravel	2-64 mm	(0.1"-2.5")	20		(FPOM)			
Sand	0.06-2n	nm (gritty)	20					
Silt	0.004-0	0.06 mm	20	Marl	grey, shell fragments			
Clay	< 0.004 ı	mm (slick)	20					
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrubs			
		Field/P			Grasses Herba			
		Agricult			_			
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft — Mode	rate 15-30ft		
		Canopy Co	ovor		Narrow <16ft	1410 10 0011		
		Open	Partly sh	aded				
		<u>✓</u> Shaded			Wetland PresentYes Wetland ID	<u>✓</u> No		
					dominant species present			
AQUATIC VE	SETATION		-	Rooted subme		ingFree floating		
	Floating algae Attached algae							
		norte ef il-	التحاط ومعام	watar				
		parts of the	e channel do not hold	water				
MACROINVER	TERRATES							
OR OTHER	(ILBIKAILO							
WILDLIFE OBSERVED/C								
OBSERVATIO NOTES	NS AND							



Photograph Direction SW

STREAM ID S-A125	STREAM NAME Price Run
LAT 39.503518 LONG -80.532843	DATE 06/04/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY, WS, RS, KL	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

i eleliliai =	_ 11110111111110	nt <u> — Epnem</u>	erai INVV —	RPW —	NRPW —	
			_			
			Measurements		Stream ErosionNone ✓ Moderate	Ноэм
		Top of Bank Width: 35.0 ft			NoneModerate	<u> —</u> пеаvy
		Top of Ban	ŭ		Artificial, Modified or Char	nnelized
		LB <u>30.0</u>	in RB <u>4.0</u>	<u>ft</u>	Yes _ <u>✓</u> No	
CHANNEL FE	ATURES	Water Dep	th: 9.00 in		Dam PresentYes _	∠ No
		Water Widt	h: 20.0 ft			
		High Water	Mark: <u>2.0 ft</u>		Sinuosity <u>~</u> 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
			ped moist		Riffle 10 % Run 80	%
FLOW		Standing	g water		Pool 10 %	
CHARACTER	ISTICS	<u></u> Flowing	water		Turbidity	
		Velocity			✓ Clear —Slightly	turbidTurbid
		Fast	Moderate		OpaqueStained	
		✓ Slow			Other	
INOR		-	MPONENTS	_	RGANIC SUBSTRATE CON	-
	(should a	add up to 10	, , , , , , , , , , , , , , , , , , ,	•	loes 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	> 256	mm (10")	10	Detritus	plant materials (CPOM)	5
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	25	Widok Wida	(FPOM)	
Sand	0.06-2n	nm (gritty)	25			
Silt	0.004-0	0.06 mm	20	Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)	5			
		Predomina ✓ Forest	ant Surrounding Lar Commer	iduse	Indicate the dominant type ✓ Trees Shrub	
		Field/P				iceous
		Agricult		tial	_	
WATERSHED FEATURES		Other:	<u>—</u>		Floodplain Width ✓ Wide > 30ft Mode	rate 15-30ft
1 2711 5112 5		Canopy Co			Narrow <16ft	rate to con
		Partly of		aded	_	
		Shaded			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and		Iominant species present	
AQUATIC VE	GETATION	Rooted	l emergent	Rooted subme		tingFree floating
		Floating	g algae	Attached algae	e	
			small fish. Stream line	d with box elde	er and american sycamore tr	ees.
MACROINVER OR OTHER	RTEBRATES					
WILDLIFE	THER					
OBSERVED/C						
NOTES						



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

STREAM ID S-A124	STREAM NAME UNT to Price Run
LAT 39.503147 LONG -80.53251	DATE 06/03/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY, RS, KL, WS	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

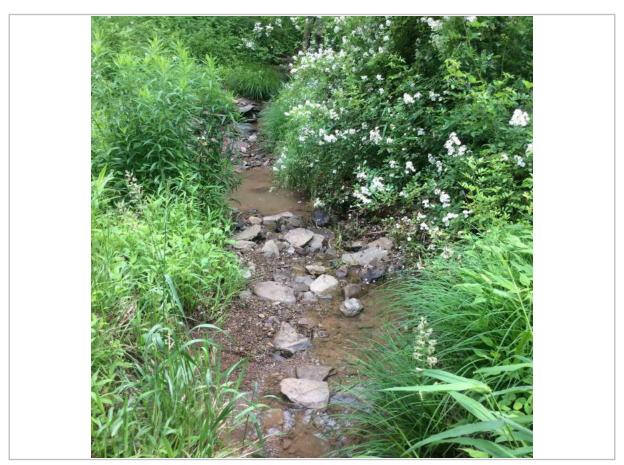
Perenniai	memme	nt <u> </u>	erai INVV —	RPW —	NRPW —	
		Cotiments •	loogurome:-t-		Stream Francisco	
			//leasurements k Width: 12.0 ft		Stream Erosion None ✓ Moderate	Heavy
		'				·
		Top of Ban	ŭ	in	Artificial, Modified or Char	nnelized
CHANNEL FEATURES		LB <u>20.0</u>		<u>in</u>	Yes No	
		·	th: <u>1.00 in</u>		Dam PresentYes _	✓ No
			th: <u>17.0 in</u>			
		High Water	Mark: <u>9.0 in</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direc	tion: North		Gradient	
						✓ Severe (10 ft/100 ft)
		Water Pres	sont		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	ssented by Stream
		Stream	bed moist		Riffle % Run	%
FLOW		Standin	-		Pool %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			<u>✓</u> ClearSlightly	turbidTurbid
		Fast	Moderate		OpaqueStained	
		<u>✓</u> Slow			Other	
INOR		STRATE CO add up to 10			RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			50	Dataitas	sticks, wood, coarse	
Boulder	> 256	mm (10")	10	Detritus	plant materials (CPOM)	5
Cobble	64-256 m	m (2.5"-10") 10	Muck Mud	black, very fine organic		
Gravel	2-64 mm	n (0.1"-2.5")	20	Muck-Mud	(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)				
			ant Surrounding Lan		Indicate the dominant type	
		Forest	Commer		✓ Trees Shrub Grasses Herba	
		— Field/P Agricul			Grasses Herba	iceous
WATERSHED		Other:		iidi	Floodplain Width	
FEATURES					Wide > 30ftMode	rate 15-30ft
		Canopy Co	over	adad	INATIOW \ TOIL	
		Partly of Shaded		aueu	Wetland PresentYes	<u>✓</u> No
					Wetland ID	
A OLIATIC VE	CETATION			d record the or Rooted subme	dominant species present	ting Free floating
AQUATIC VE	SETATION			Attached alga	<u> </u>	ingrree libating
					-	
MACROINVER	RTEBRATES	<u>, </u>				
OR OTHER						
WILDLIFE OBSERVED/C						
OBSERVATION NOTES	NS AND					



Photograph Direction South

STREAM ID S-A118	STREAM NAME UNT to Price Run
LAT 39.502549 LONG -80.523405	DATE 06/01/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY,KL,RS	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai =	_ 11116111111116	nt <u> —</u> Epnem	erai INVV	RPW —	NRPW —	
	Estimate Measurements Top of Bank Width: 6.0 ft			Stream ErosionNone ✓ Moderate	Heavy	
		-	Top of Bank Height:			-
			ŭ		Artificial, Modified or Char	nnelized
		LB <u>12.0</u>		<u>in</u>	Yes No	
CHANNEL FE	ATURES	·	th: 2.50 in		Dam PresentYes _	✓ No
		Water Widt	th: 33.0 in			_
		High Water	Mark: <u>6.0 in</u>		Sinuosity Low	Medium High
		Flow Direc	tion: Northeast		Gradient	
						Severe
		W (5			, ,	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
			bed moist		Riffle 10 % Run 10	%
FLOW		Standin	g water		Pool 80 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			✓ ClearSlightly	turbidTurbid
		Fast	Moderate		OpaqueStained	
		✓ Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CON	/IPONENTS
	(should add up to 100%)		0%)	(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			5	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	15	Detilius	plant materials (CPOM)	5
Cobble	64-256 mm (2.5"-10")		25	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	า (0.1"-2.5")	40	Widek-Widd	(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)				
	Predominant Surrounding Lar				Indicate the dominant type	
		Forest Field/P	Commer astureIndustria		✓ Trees Shrub Grasses Herba	os aceous
		— Agricul			Olasseslleiba	iceous
WATERSHED		Other:			Floodplain Width	
FEATURES					Wide > 30ft Mode Narrow <16ft Mode	rate 15-30ft
		Canopy Co		adod	<u>• Ivanow viole</u>	
		-	Partly open Shaded Open		Wetland Present _v_Yes	No
	— Wetland ID W-A27					
AOUATIC VE	Indicate the dominant type and record the dominant species present QUATIC VEGETATION Rooted emergent Rooted submergent Rooted floating Free fl			ting Free floating		
			Attached algae	<u> </u>	rree noaung	
		_				
		Wetland fri	nge present: approvin	nately 1' wide	on each bank. (W-A27)	
		VVCdana III	ngo prodoni, approxim	natory i wide t	on saon bank. (W-MZI)	
MACROINVERTEBRATES						
OR OTHER	OR OTHER					
WILDLIFE OBSERVED/C						
OBSERVATION NOTES	NS AND					



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

STREAM ID S-A120	STREAM NAME Stout Run
LAT 39.489692 LONG -80.520845	DATE 06/03/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY, KL, RS, WS	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai _		nt <u> </u>	erai INVV —	RPW —	NRPW —	
		F-4!4: •	1		Otroom Front	
	Estimate Measurements Top of Bank Width: 6.0 ft			Stream Erosion None ✓ Moderate	Heavy	
		Top of Bank Width:				·
			ŭ		Artificial, Modified or Char	nnelized
		LB <u>18.0</u>		<u>n</u>	Yes No	
CHANNEL FE	ATURES	·	th: 3.00 in		Dam PresentYes _	<u>∕</u> No
			th: 27.0 in		Sinuosity <u>v</u> Low	Modium High
			Mark: <u>13.0 in</u>		Siliuosity V Low	iviedidiri riigiri
		Flow Direc	tion: West		Gradient	
						Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types	•
		_	bed moist		Riffle 20 % Run 30 Pool 50 %	%
FLOW		Standing	-		F001 50 %	
CHARACTER	ISTICS	<u>v</u> riowing	water		Turbidity	
		Velocity			Clear Slightly	
		Fast ✓ Slow	Moderate		OpaqueStainedOther	
INOD			MOONENTO	_		IDONENTO
INOR		STRATE CO add up to 10			RGANIC SUBSTRATE CON does not necessarily add u	
Substrate Type	Diameter		% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			10	Dotrituo	sticks, wood, coarse	
Boulder	> 256	mm (10")	10	Detritus	plant materials (CPOM)	10
Cobble	64-256 mm (2.5"-10")		25	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	า (0.1"-2.5")	0	iviuck-iviuu	(FPOM)	
Sand	0.06-2n	nm (gritty)	40			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	5			
	Predominant Surrounding Lar				Indicate the dominant type	
		Forest Field/P	Commer asture Industrial		✓ Trees Shrub Grasses Herba	
		— Agricul	- · · · · · · - · · · · · · · · · · · ·	tial	_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
LATORES		0			Narrow <16ft	rate 15-50ft
		Canopy Co	over open ✓ Partly sh	aded	_	
- - : : : :				Wetland Present ✓ Yes Wetland ID W-A34	No	
		Indicate th	e dominant type and		dominant species present	
AQUATIC VE	GETATION			Rooted subme		tingFree floating
Floating algae Attached algae			_			
MACROINVERTEBRATES						
OR OTHER WILDLIFE						
OBSERVED/C OBSERVATIO						
NOTES						



Photograph Direction West

STREAM ID S-A119	STREAM NAME UNT to Stout Run
LAT 39.489339 LONG -80.520408	DATE 06/03/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY,WS, KL, RS	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

Perenniai –	memilie	nt <u> </u>	erai Tivvv	RPW —	NRPW —	
		F-414- B			Ota	
	Estimate Measurements Top of Bank Width: 5.0 ft			Stream Erosion None ✓ Moderate	Heavy	
· ·		·	<u> </u>		Woderate	
		Top of Ban	ŭ		Artificial, Modified or Char	nnelized
		LB <u>15.0</u>	in RB <u>14.0</u>	<u>in</u>	Yes _ <u>✔</u> No	
CHANNEL FE	ATURES	•	th: 1.00 in		Dam PresentYes _	✓ No
		Water Widt	h: 22.0 in			
		High Water	Mark: <u>8.0 in</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: Northwest		Gradient	
						Severe
		Water Pres			, , ,	(10 ft/100 ft)
			r, stream bed dry		Proportion of Reach Representation Morphology Types	esented by Stream
			ped moist		Riffle % Run	%
FLOW		<u>✓</u> Standin	g water		Pool %	
CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			✓ ClearSlightly	turbidTurbid
		Fast	Moderate		OpaqueStained	
		Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS		RGANIC SUBSTRATE COM	
	(should a	add up to 10	, , , , , , , , , , , , , , , , , , ,	(0	does not necessarily add u	p to 100%)
Substrate Type	Diameter		% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			5	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	20	Detritus	plant materials (CPOM)	20
Cobble	64-256 mm (2.5"-10")		25	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	1 (0.1"-2.5")	30	Widok Wida	(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)				
			ant Surrounding Lar		Indicate the dominant type	
		<u>✓</u> Forest Field/Pa	Commer asture Industria		✓ Trees Shrub Grasses Herba	s ceous
		— Agricult			Orassesrierba	ceous
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
PEATURES					Narrow <16ft	rate 15-301t
		Canopy Co	over open ✓ Partly sh	aded	- Nariow Front	
		Shaded		aucu	Wetland Present _v Yes	No
		_			Wetland ID W-A34	
AOUATIC VE	SETATION			d record the d Rooted subme	dominant species present ergent Rooted float	ting Free floating
AQUATIO VE	AQUATIC VEGETATIONRooted emergentRooted submergentRooted floatingFree floating algae Attached algae					
		<u> </u>				
MACROINVERTEBRATES						
OR OTHER WILDLIFE						
OBSERVED/C						
OBSERVATIO NOTES	UNA GNU					



Photograph Direction North

STREAM ID S-QR34		STREAM NA	STREAM NAME UNT to Stout Run			
CLIENT MVP		PROJECT N	PROJECT NAME MVP			
LAT 39.489149 LONG -80.520697					COUNTY Wetzel	
INVESTIGATO	DRS D Ha	dersbeck, J McC	Guirk, C Sapusek			
WATER TYPE	RPW	NRPW	FLOW REG Perennial	Interm	ittent Ephemeral 🗸	
CHANNEL FE	ATURES	Top of Bank Width: 2.5 ft Gradient Flat Moderate			derate Severe (10 ft/100 ft) Heavy nelized No	
FLOW CHARACTER	No water, streamStream bed moist Standing water				Morphology Types (Only enter Riffle % Run 10 Pool % Turbidity Clear ✓ Slightly to Other	er if water present) 00 %
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100					ORGANIC SUBSTRATE COM (does not necessarily add u	
Substrate Type		meter	% Composition in Sampling Reach	Substrat Type		% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder	> 2	56 mm (10")	5	Detilitus	plant materials (CPOM)	40
Cobble	64-256	6 mm (2.5"-10")	15	Muck-Muck	black, very fine organic	
Gravel		nm (0.1"-2.5")	25	WIGOK WIG	(FPOM)	
Sand	0.06	-2mm (gritty)	30			
Silt	0.00	04-0.06 mm	25	Marl	grey, shell fragments	
Clay	< 0.00	04 mm (slick)				
Predominant Surrounding Landuse ✓ Forest Commercial — Field/Pasture Industrial — Agricultural Residential — ROW Other: Road Canopy Cover — Open ✓ Partly shaded — Shaded Floodplain Width — Wide > 30ft Moderate 15-30ft — Narrow <15ft Varrow <15ft Floodplain Width — Wide > 30ft Moderate 15-30ft — Varrow <15ft ✓ Partly shaded			ate 15-30ft			
MAC	MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS					
Starts as epher	meral and	turns into roadsi	de stream that joins i	into S-A121.		



Photograph Direction West

STREAM ID S-J60	STREAM NAME Sams Run
LAT 39.474077 LONG -80.512283	DATE 05/31/2015
PROJECT NAME MVP	CLIENT MVP
INVESTIGATORS Pete Johnson, Chris Weber,	Nate K
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

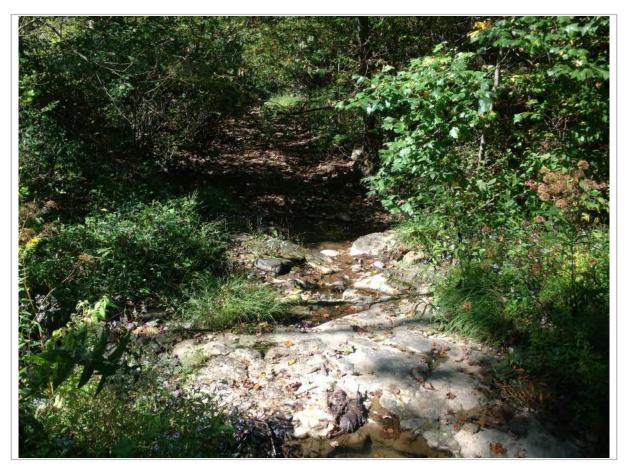
refermal =		nt <u> </u>	erai INVV —	RPW —	NRPW —	
					O. F.:	
	Estimate Measurements Top of Bank Width: 14.0 ft			Stream ErosionNone ✓ Moderate	Heavy	
· ·				NoneNoderate	Ticavy	
		Top of Ban	ŭ	_	Artificial, Modified or Char	nnelized
		LB <u>5.0</u>		<u>ft</u>	Yes _ <u>✔</u> No	
CHANNEL FE	ATURES	Water Dep	th: 4.00 in		Dam PresentYes _	4 No
		Water Widt	h: <u>5.0 ft</u>		Dam Present res _	Z NO
		High Water	Mark: 2.5 in		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: W		Gradient	
						Severe
					(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 40	%
		Standin	bed moist g water		Pool 45 %	70
FLOW CHARACTER	ISTICS	Flowing	-		10	
CHARACTER	131103	_			Turbidity	امنامان کا استان ا
		Velocity	✓ Madarata		✓ ClearSlightlyOpaqueStained	
		Fast Slow	✓ Moderate		Other	
INOR	CANIC CUB	STRATE CO	MDONENTS		RGANIC SUBSTRATE CON	ADONENTS
INOR		add up to 10			does not necessarily add u	
Substrate	`	•	% Composition in	Substrate		% Composition in
Type	Diame	eter	Sampling Reach	Type	Characteristic	Sampling Area
Bedrock			5	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	40	Detritus	plant materials (CPOM)	40
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	0
Gravel	2-64 mm	า (0.1"-2.5")	10	Wack-Waa	(FPOM)	0
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	iduse	Indicate the dominant type	
		— Forest	Commer	cial	✓ TreesShrub	
		— Field/P			Grasses Herba	iceous
WATERSHED		Other:	tulai <u>v</u> Residell	uai	Floodplain Width	
FEATURES					Wide > 30ft ✓ Mode Narrow <16ft	rate 15-30ft
		Canopy Co			Narrow < 1610	
			ppen Partly sh	aded	Wetland PresentYes	✓ No
	ShadedOpen				Wetland ID	
					dominant species present	
AQUATIC VE	AQUATIC VEGETATION Rooted emergent Rooted submergent Rooted floating Free Rooted floating Rooted floating Free Rooted floating Free Free Rooted floating Free Rooted floating Free Free Free Free			tingFree floating		
				Allacried alga	<u> </u>	
		1				
MACROINVERTEBRATES OR OTHER						
	WILDLIFE OBSERVED/OTHER					
OBSERVATION NOTES						
NOTES						



Photograph Direction West

STREAM ID S-J56	STREAM NAME Manion Run
LAT 39.464274 LONG -80.502218	DATE 05/31/2015
PROJECT NAME MVP	CLIENT MVP
INVESTIGATORS Pete Johnson, Chris Weber,	Nate K
FLOW REGIME Perennial — Intermittent — Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai 🚣	_ Intermitte	nt <u> — Epnem</u>	eral TNW	RPW 🚣	NRPW	
			_			
	Estimate Measurements Top of Bank Width: 10.0 ft			Stream ErosionNone ✓ Moderate	Незуу	
Тор		·	<u> </u>		NoneNoderate	Tleavy
		Top of Ban	ŭ	, ,	Artificial, Modified or Char	nnelized
		LB <u>4.0</u>		<u>ft</u>	Yes No	
CHANNEL FE	ATURES	·	th: 2.00 in		Dam PresentYes _	✓ No
		Water Widt	th: 5.0 ft			
		High Water	Mark: <u>3.0 ft</u>		Sinuosity Low	Medium High
		Flow Direc	tion: SE		Gradient	
						Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	-
		Stream			Riffle 70 % Run 15	%
FLOW		Standing	•		Pool 15 %	
CHARACTERI	ISTICS	<u>riowing</u>	water		Turbidity	
		Velocity			<u>✓</u> ClearSlightly	
			<u>✓</u> Moderate		OpaqueStainedOther	
		Slow				
INOR		STRATE CO add up to 10	MPONENTS 0%)	_	RGANIC SUBSTRATE CON does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			15	Dotrituo	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")	20	Detritus	plant materials (CPOM)	20
Cobble	64-256 m	m (2.5"-10")	35	Muck-Mud	black, very fine organic	40
Gravel	2-64 mm	(0.1"-2.5")	10	IVIUCK-IVIUU	(FPOM)	10
Sand	0.06-2n	nm (gritty)	15			
Silt	0.004-0	.06 mm 5		Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)				
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
		Field/P			Grasses Herba	
		Agricul			_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
		Canopy Co	ovor		Narrow <16ft	
		Partly of	ppenPartly sh	aded		
l —		Open		Wetland PresentYes Wetland ID	<u>✓</u> No	
		Indicate th	e dominant type and	d record the d	dominant species present	
AQUATIC VEC	GETATION	Rooted	l emergent	Rooted subme	ergentRooted float	tingFree floating
		Floatin	g algae	Attached alga	е	
		_				
MAGDONNEDTEDDATES						
MACROINVERTEBRATES OR OTHER						
WILDLIFE OBSERVED/C	THER					
OBSERVATIO NOTES						
.10123						



Photograph Direction SW

STREAM ID S-J59	STREAM NAME UNT to Manion Run
LAT 39.462645 LONG -80.504754	DATE 05/31/2015
PROJECT NAME MVP	CLIENT MVP
INVESTIGATORS Pete Johnson, Chris Weber,	Nate K
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai –		nt <u> </u>	erai Tivvv	RPW —	NRPW —		
		T = 0			Otro and Francisco		
		Estimate Measurements Top of Bank Width: 3.0 ft			Stream ErosionNone _v_ModerateHeavy		
		-			Woderate		
		Top of Ban	ŭ	. .	Artificial, Modified or Char	nnelized	
		LB <u>1.0 ft</u> RB <u>1.0 ft</u>		<u>ft</u>	Yes <u>✓</u> No		
CHANNEL FE	ATURES	Water Dep	th: <u>1.00 in</u>		Dam PresentYes <u>✓</u> No		
		Water Widt	h: 6.0 in		Daili Fleseill 165 _	<u>/ </u>	
		High Water	Mark: <u>6.0 in</u>		Sinuosity Low	Medium High	
		Flow Direct	tion: S		Gradient		
		Tiow Birection.			FlatModerate <u></u> ✓Severe		
					(0.5/100 ft (2 ft/100 ft) (10 ft/100		
		Water Present			Proportion of Reach Represented by Stream		
			r, stream bed dry bed moist		Morphology Types Riffle 15 % Run 40 %		
		_			Pool 45 %		
FLOW CHARACTER	ISTICS	✓ Standing water ✓ Flowing water					
OHARAGIER	01100	<u></u>			Turbidity <u>✓</u> ClearSlightly turbidT OpaqueStained		
		Velocity					
		Fast Moderate Slow			Other		
INOR	CANIC SUB	_	MDONENTS	_		IDONENTS	
INON		BSTRATE COMPONENTS add up to 100%)			ORGANIC SUBSTRATE COMPONENT (does not necessarily add up to 100%		
Substrate	D:		% Composition in	Substrate		% Composition in	
Type	Diame	eter	Sampling Reach	Type	Characteristic	Sampling Area	
Bedrock			5	Detritus	sticks, wood, coarse		
Boulder	> 256	mm (10")	40	200.100	plant materials (CPOM)	40	
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	0	
Gravel	2-64 mm (0.1"-2.5")		10	Widok Wida	(FPOM)	U	
Sand	0.06-2n	nm (gritty)	10				
Silt	0.004-0.06 mm		5	Marl	grey, shell fragments		
Clay	< 0.004 mm (slick) 0		-				
			ant Surrounding Lan		Indicate the dominant type (Check one)		
		Forest	Commer		✓ Trees ✓ Shrub — Grasses — Herba	S	
		Field/PastureIndustrialAgricultural Residenti			Grassesrierba	ceous	
WATERSHED		Other:			Floodplain Width Wide > 30ft Narrow <16ft Woderate 15-30ft		
FEATURES							
		Canopy Co	over	adad	INATIOW \ TOIL		
		Partly open Partly shaded ✓ Shaded Open			Wetland PresentYes _✓ No		
					Wetland ID		
Indicate the dominant type and record the dominant species present					ina Frontina		
AQUATIC VE	EIATION		Rooted emergent Rooted submergent Rooted floating Free floating Floating algae Attached algae				
				r tituoriou uigu			
		1					
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES							
		'					



Photograph Direction South

STREAM ID S-J58	STREAM NAME UNT to Manion Run				
LAT 39.462538 LONG -80.505381	DATE 05/31/2015				
PROJECT NAME MVP	CLIENT MVP				
INVESTIGATORS Pete Johnson, Chris Weber, Nate K					
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —				

Type Diameter Sampling Reach Type Characteristic Sampling Area Bedrock 5 Detritus Sticks, wood, coarse plant materials (CPOM) 30 Cobble 64-256 mm (10") 20 Muck-Mud black, very fine organic (FPOM) 0 Sand 0.06-2mm (gritty) 20 Marl grey, shell fragments Clay 0.004-0.06 mm 5 Marl grey, shell fragments Predominant Surrounding Landuse	i elellillai =		nt <u> </u>	erai INVV —	RPW —	NRPW —		
Top of Bank Width: 5.0 ft Top of Bank Height: La 4.0 ft RB 4.0 ft Water Poeth: 1.00 in Water Width: 1.0 ft High Water Mark: 1.0 ft High Water Mark: 1.0 ft RB 4.0 ft Water Width: 1.0 ft High Water Mark: 1.0 ft Row Direction: 5 Gradient Flow Direction: 5 Gradient Control of the Moderate Control			Ten in			Student Function		
Top of Bank Height: LB 4.0 ft RB 4.0								
CHANNEL FEATURES LB 4.0			-					
Water Depth: 1.00 in Water Width: 1.0 it				ŭ			nnelized	
Water Width: 1.0 ft High Water Mark: 1.0 ft Flow Direction: S Gradient Flow Direction: S Flow D			LB <u>4.0 ft</u> RB <u>4.0 ft</u>		<u>It</u>	Yes <u>v_</u> No		
High Water Mark: 1.0 _ft Sinuosity _ Low _ Medium _ High High Water Mark: 1.0 _ft Gradient _ (0.5100 ft C.0100 ft	CHANNEL FE	ATURES	Water Dep	th: <u>1.00 in</u>		Dam Present Vos 3 No		
FLOW CHARACTERISTICS Water Present			Water Widt	th: 1.0 ft		Dam Fresent 165 _	<u>/</u> NO	
Water Present			High Water	Mark: <u>1.0 ft</u>		Sinuosity Low	Medium High	
Water Present			Flow Direct	tion: S		Gradient		
Water Present						Flat Moderate Severe		
No water, stream bed dry Stream bed moist Standing water Pool 45 % Run 40 %								
Stream bed moist								
Standing water Flowing water Flowing water Flowing water Flowing water Velocity Fast Fast Moderate Slow Flowing water Flowing water Velocity Fast Flowing water Flowing water Flowing water Velocity Flowing water Velocity Flowing water Flowing water Velocity Flowing water Velocity Flowing water Turbidity Flowing Ches materials CPOMPONENTS (does not necessarily add up to 100%) Substrate Type Characteristic Substrate Type Characteristic Substrate Type Characteristic Sticks, wood, coarse plant materials (CPOM) 30 Detritus Floating added Flowing water Flowing Mater Flowin				•		. 0, ,,		
Turbidity Velocity Fast Slow Slow Velocity Fast Slow Slow Slow Substrate Type Diameter Sampling Reach Sampling Reach Sand Sand Solobele G4-256 mm (10") Sand Gravel 2-64 mm (0.1"-2.5") Sand O.008-2mm (gritty) Clear Sampling Reach Sand Substrate Field/Pasture Industrial Agricultural Agricultural Agricultural Site Canopy Cover Partly open Partly shaded Shaded Open Indicate the dominant type (Check one) Wetland Present Wetland ID Indicate the dominant species present Rooted floating Field/Ipasture Predominant type and record the dominant species present Rooted submergent Rooted submergent Rooted submergent Rooted floating Field light Rooted emergent Rooted submergent Rooted submergent Rooted floating Field light Field light Rooted floating Field light Rooted floating Free floating Free floating Rooted floating Free floating Free floating Rooted Free floating Free floating Rooted Free floating Free floating Free floating Rooted Free floating F			_					
Velocity		ISTICS		-				
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) Substrate Type Diameter Sampling Reach Type Diameter Substrate Type Characteristic Substrate Type Substrate Type Characteristic Substrate Type Characteristic Substrate Substrate Substrate Type Characteristic Substrate Substrate Type Characteristic Substrate Type Characteristic Substrate Type Characteristic Substrate Type Substrate Type Characteristic Substrate Type Characteristic Substrate Type Characteristic Substrate Type	011111111111111111111111111111111111111	.01100				✓ Clear — Slightly turbid —		
Slow								
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) Composition in Substrate Type Diameter								
Substrate Type Diameter						MPONENTS		
Sampling Reach Type Characteristic Sampling Area								
Bedrock 5 Detritus Sticks, wood, coarse plant materials (CPOM) 30 Cobble 64-256 mm (10") 30 Muck-Mud Dlack, very fine organic (FPOM) 0 Gravel 2-64 mm (0.1"-2.5") 20 Muck-Mud Dlack, very fine organic (FPOM) 0 Sand 0.06-2mm (gritty) 20 Silt 0.004-0.06 mm 5 Marl grey, shell fragments Clay < 0.004 mm (slick) 0 Marl grey, shell fragments WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES Indicate the dominant type (Check one) Marl Grasses Herbaceous Floodplain Width Wide > 30ft Moderate 15-30ft Wetland Present Yes No Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Rooted submergent Rooted floating Free floating algae MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSE		Diame	ter			Characteristic		
Boulder > 256 mm (10") 30 Detritus plant materials (CPOM) 30 Cobble 64-256 mm (2.5"-10") 20 Muck-Mud black, very fine organic (FPOM) 0 Gravel 2-64 mm (0.1"-2.5") 20 Muck-Mud black, very fine organic (FPOM) 0 Sand 0.06-2mm (gritty) 20 Marl grey, shell fragments Clay < 0.004 mm (slick) 0 Marl grey, shell fragments Clay < 0.004 mm (slick) 0 Indicate the dominant type (Check one)					Туре	atials would assure	Sampling Area	
Cobble 64-256 mm (2.5"-10") 20		> 256 mm (10")			Detritus		30	
Gravel 2-64 mm (0.1"-2.5") 20 Mack-wide (FPOM) 0	Cobble	64-256 m	m (2.5"-10")	20	NAME OF NAME	black, very fine organic	_	
Silt 0.004-0.06 mm 5	Gravel	2-64 mm	n (0.1"-2.5")	20	IVIUCK-IVIUO		0	
Clay < 0.004 mm (slick) 0	Sand	0.06-2n	nm (gritty)	20				
WATERSHED FEATURES Predominant Surrounding Landuse	Silt					grey, shell fragments		
WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES Residential	Clay	< 0.004	mm (slick)	0				
WATERSHED FEATURES - Field/Pasture Industrial Grasses Herbaceous - Agricultural Residential - Other: Wide > 30ft Moderate 15-30ft - Narrow <16ft - Partly open Partly shaded Shaded Open				Predominant Surrounding Landuse		Indicate the dominant type (Check one)		
WATERSHED FEATURES Agricultural Other: Floodplain Width Wide > 30ft V Moderate 15-30ft Canopy Cover Partly open Partly shaded V Shaded Open Wetland ID 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 WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			_			<u>✓</u> Trees <u>✓</u> Shrub	s	
WATERSHED FEATURES Other: Canopy Cover Partly open Shaded Open Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Floating algae MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVED/OTHER OBSERVATIONS AND Other: Wide > 30ft Narrow <10ft Wetland Present Wetland ID Wetland ID Floating algae Floating algae Floating Attached algae Floating Attached algae						GrassesHerba	iceous	
Canopy Cover Partly open Shaded Open Metland Present Wetland ID Indicate the dominant type and record the dominant species present Rooted emergent Floating algae MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND				Kesideli	ııaı			
AQUATIC VEGETATION Canopy Cover	FEATURES		Other.					
AQUATIC VEGETATION Indicate the dominant type and record the dominant species present Rooted emergent Floating algae Attached algae MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			Canopy Co	over		*********************************		
Indicate the dominant type and record the dominant species present Rooted emergent Floating algae MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND					aded			
AQUATIC VEGETATIONRooted emergentRooted submergentRooted floatingFree floatingAttached algaeAttached algaeAttached algaeRooted floatingFree floatingFree floatingFree floatingFree floatingFree floatingFree floatingRooted submergentRooted floatingFree floating			Snaded Open			Wetland ID		
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND								
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND	AQUATIC VE	GETATION						
OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			1 10atii1		Allacried alga	<u> </u>		
OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			1					
OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND								
OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND	OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND		,					
OBSERVED/OTHER OBSERVATIONS AND			;					
OBSERVATIONS AND								
NOTES								



Photograph Direction North

STREAM ID S-K77	STREAM NAME Traugh Fork				
LAT 39.228944 LONG -80.552482	DATE 06/01/2015				
CLIENT MVP	PROJECT NAME MVP				
INVESTIGATORS J. Hart, D. Santillo, J. Potrikus					
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —				

		Estimate Measurements		Stream Erosion			
		Top of Bank Width: 4.0 ft			None <u>v</u> ModerateHeavy		
		Top of Bank Height:			Artificial, Modified or Channelized		
		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	Yes _ <u>✔</u> No		
CHANNEL FE	ATURES	Water Dep	th: <u>1.00 in</u>		Dom Bracent Voc. 4 No.		
		Water Widt	h: <u>2.0 ft</u>		Dam PresentYes _	Z NO	
		High Water	Mark: <u>3.0 ft</u>		Sinuosity 🔽 Low	Medium High	
		Flow Direction: Northwest			Gradient		
			Tion Birodion.		Flat <u>✓</u> ModerateSevere		
					, ,	(10 ft/100 ft)	
		Water Present			Proportion of Reach Represented by Stream		
			r, stream bed dry bed moist		Morphology Types Riffle 30 % Run 60 %		
		Stream bed moist Standing water			Pool 10 %		
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	water				
					Turbidity <u>✓</u> ClearSlightly	turbidTurbid	
		Velocity Fast	Moderate		OpaqueStained		
		✓ Slow			Other		
INOR		SSTRATE COMPONENTS add up to 100%)		_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate			% Composition in	Substrate		% Composition in	
Туре	Diame	ter	Sampling Reach	Туре	Characteristic	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder		mm (10")	5	Dountdo	plant materials (CPOM)	10	
Cobble	64-256 mm (2.5"-10")		15	Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")	25		(FPOM)		
Sand		0.06-2mm (gritty)					
Silt		0.06 mm	15	Marl	grey, shell fragments		
Clay	< 0.004	nm (slick) 20					
		Predominant Surrounding Landuse Forest Commercial			Indicate the dominant type (Check one) Trees Shrubs		
		Field/PastureIndustrial		_			
MATEROUER		Agricultural Residentia		tial	al Floodplain Width		
WATERSHED FEATURES		Other: Canopy Cover			Wide > 30ft Moderate 15-30ft Narrow <16ft		
		Partly o		aded			
		ShadedOpen			Wetland ID W-K45, W-K46		
		Indicate th	Indicate the dominant type and record the dominant species present				
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating					
<u> </u>			Floating algae Attached algae				
		Intermittent	Intermittent stream drains small valley, adjacent to W-K45 and W-K46.				
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES							
		Ī					



Photograph Direction NE

STREAM ID S-K67	STREAM NAME UNT to Big Issac Creek
LAT 39.210322 LONG -80.553060	DATE 05/31/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perennial _	nt <u> </u>	eral —	TNW	RPW <u>✓</u>	NRPW		
		Estimate N	leasur	ements		Stream Erosion	
		Top of Ban	k Width	n: 10.0 ft		None Moderate	Heavy
		Top of Ban	k Heigl	nt:		Artificial Madified or Char	analizad
		LB_3.0 ft RB_5.0			ft	Artificial, Modified or Char ✓ Yes No	illelizeu
		Water Depth: 0.50 in			_	<u> </u>	
CHANNEL FE	ATURES	-				Dam PresentYes	<u>/_</u> No
		Water Width: 3.0 ft				Cinuacity / Law	Madium Lligh
		High Water				Sinuosity ✓ Low	wedium nign
		Flow Direct	ion: <u>W</u>	/est		Gradient	
						Flat Moderate	Severe
		14/-4 D	4			, , , ,	(10 ft/100 ft)
		Water Pres		m bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
		Stream b				Riffle 25 % Run 55	%
		✓ Standing				Pool 20 %	
FLOW CHARACTER	ISTICS	✓ Flowing					
						Turbidity ✓ Clear —Slightly	turbidTurbid
		Velocity Fast	Mc	nderate		OpaqueStained	
		Fast Moderate ✓ Slow			Other		
INORGANIC SUBSTRATE CO			MPON	ENTS	0	RGANIC SUBSTRATE COM	MDONENTS
(should add up to 100			-	LITTO	_	does not necessarily add u	
Substrate	Diama			composition in	Substrate		% Composition in
Type	Diame	ter		mpling Reach	Туре	Characteristic	Sampling Area
Bedrock					Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	3	30	Detilitus	plant materials (CPOM)	30
Cobble	64-256 m	m (2.5"-10")	1	5	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	1 (0.1"-2.5")	2	25	WIGGK-WIGG	(FPOM)	
Sand	0.06-2n	nm (gritty)	5	5			
Silt	0.004-0	0.06 mm	10		Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)	1	5			
			nt Sur	rounding Lan	duse	Indicate the dominant type	
		✓ Forest Comme				✓ TreesShrub	
		— Field/Pa		Industrial Resident		Grasses Herba	iceous
WATERSHED		Other:	urai	Residen	liai	Floodplain Width	
FEATURES		00101.				Wide > 30ft Mode	rate 15-30ft
		Canopy Cover				✓ Narrow <16ft	
			pen	Partly sh	aded	Wetland Present Yes	✓ No
Sha				Open		Wetland ID	<u></u>
Indicate the dominant type							
AQUATIC VEGETATIONRooted eme			_	Rooted subm	_	tingFree floating	
Floating algae			Attached alga	e			
Drains north sid		h side :	small valley, lik	ely groundwa	ter contributions, cleared gra	ssland area to south	
		(2015)					
MACROINVER OR OTHER	RTEBRATES	Information	listed :	on this form re	nresents the c	lata collected in 2015. The st	ream was revisited
WILDLIFE						nnel and OHWM was confirm	
OBSERVED/C							
NOTES							

Stream ID S-K67



Photograph Direction NE

Date: 05/31/2015

Comments: 2015 stream identification.



Photograph Direction NE

Date: 09/20/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-K65	STREAM NAME UNT to Big Issac Creek
LAT 39.209810 LONG -80.552490	DATE 05/31/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

			leasurements		Stream Erosion		
		l '	k Width: 8.0 ft		None✓ Moderate	Heavy	
		Top of Banl	•		Artificial, Modified or Chan	nelized	
		LB <u>1.5</u>		<u>ft</u>	Yes✓ No		
CHANNEL FEATURES		Water Dept	h: <u>0.50 in</u>		Dam PresentYesv	′ No	
		Water Widt	h: <u>3.0 ft</u>			_	
		High Water	Mark: <u>6.5</u> ft		Sinuosity _/ Low	Medium High	
		Flow Direct	ion: West		Gradient		
						Severe (10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	sented by Stream	
			r, stream bed dry bed moist		Morphology Types Riffle 25 % Run 55	%	
		✓ Standing			Pool 20 %	,,	
FLOW CHARACTER	ISTICS	✓ Flowing			T		
		Velocity			Turbidity ✓ Clear —Slightly	turbidTurbid	
		,	Moderate		OpaqueStained		
✓ Slow					Other		
INORGANIC SUBSTRATE COMPONENTS				RGANIC SUBSTRATE COM			
	(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			0	Detritus	sticks, wood, coarse		
Boulder		mm (10")	15		plant materials (CPOM)	15	
Cobble		ım (2.5"-10")	15	Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")	25		(FPOM)		
Sand		nm (gritty)	5				
Silt		0.06 mm	20	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	20	4	In all a startle and a surface and the same	(0)	
		Predomina <u>✓</u> Forest	int Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub:		
		Field/Pa		olai	Grasses Herba		
		Agricult	ural Resident	ial			
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Moder	ate 15-30ft	
		Canopy Co	wor		✓ Narrow <16ft		
		Partly o		aded			
		Shaded	Open		Wetland PresentYes Wetland ID	_✓ No	
					lominant species present		
AQUATIC VE	GETATION	_	_		ergentRooted float	ingFree floating	
		Floating	g aigae	Attached algae	e		
		1					
		1 4 144 4	and the second s		rollov likoly groupdwater cont		

MACROINVERTEBRATES
OR OTHER
WILDLIFE
OBSERVED/OTHER
OBSERVATIONS AND
NOTES
Intermittent stream drains south side of small valley, likely groundwater contributions, cleared grassland area to north.

Information listed on this form represents the data collected in 2015. The stream was revisited on 09/20/2019. The presence of a stream channel and OHWM was confirmed.

Stream ID S-K65



Photograph Direction NE

Date: 05/31/2015

Comments: 2015 stream identification.



Photograph Direction East

Date: 09/20/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-K54	STREAM NAME UNT to Big Issac Creek
LAT 39.207844 LONG -80.552695	DATE 05/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

-						
			/leasurements k Width: 7.0 ft		Stream Erosion None ✓ Moderate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Char	nolizod
		LB 1.5 ft RB <u>1.5</u> f			Yes ∠ No	menzeu
CHANNEL FE	ATUDEO		th: 0.50 in		_	
CHANNEL FE	CHANNEL FEATURES		th: 3.0 ft		Dam PresentYes	<u>∕</u> No
			Mark: <u>5.5</u> ft		Sinuosity <u>v</u> Low	Medium High
			tion: West			<u> </u>
		Flow Direct	lion: vvest		Gradient Flat Moderate	✓ Severe
					(0.5/100 ft (2 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	sented by Stream
			r, stream bed dry		Morphology Types Riffle 30 % Run 50	%
		✓ Standing	bed moist g water		Pool 20 %	70
FLOW CHARACTER	STICS	<u>✓</u> Flowing			20	
CHARACTER	31103	_			Turbidity	لمنطس ت
		Velocity	Madarata		Clear Slightly Opaque Stained	turbidTurbid
		Fast ✓ Slow	Moderate		Other	
INOR	INORGANIC SUBSTRATE COMP					IDONENTO
INOR		add up to 10			RGANIC SUBSTRATE CON does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Deteitere	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")		Detritus	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	30	Muck Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	30	Muck-Mud	(FPOM)	
Sand	0.06-2n	nm (gritty)	15			
Silt	0.004-0).06 mm	15	Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)	10			
WATERSHED FEATURES WATERSHED Canopy Cover Partly open		asture Industria tural Residen	rcial I tial aded	Indicate the dominant type I Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Narrow <16ft Wetland Present Yes Wetland ID	s ceous rate 15-30ft	
AQUATIC VEGETATION		Rooted	Indicate the dominant type and record the dominant species present Rooted emergent Floating algae Attached algae Rooted submergent Attached algae Rooted floating Free floating			
L — '				7 tttaorioù aigat		
		Intermittent	stream drains deenly	, incised draw	Recent precipitation accou	nts for slightly turbid
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES		water. Con			necent precipitation accou	



Photograph Direction NNE

STREAM ID S-K58	STREAM NAME UNT to Big Issac Creek
LAT 39.205596 LONG -80.553230	DATE 05/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potriki	us
FLOW REGIME Perennial — Intermittent— Ephemeral —	WATER TYPE TNW — RPW — NRPW ✓

Perennial _	Intermitte	nt Ephem	eral 🗹 TNW	RPW	NRPW <u>~</u>	
			Measurements k Width: 2.5 ft		Stream Erosion None ✓ Moderate	Ности
		•	K Widdi.		NoneModerate	<u> —</u> пеаvy
		Top of Ban	ŭ	_	Artificial, Modified or Char	nnelized
		LB <u>2.0</u>		<u>ft</u>	Yes No	
CHANNEL FE	ATURES	Water Dep	th: 0.00 in		Dam Present Yes	. No
		Water Widt	th: 0.0 ft		Dam Flesent 165 _	<u>/ </u>
		High Water	Mark: <u>2.0 ft</u>		Sinuosity Low	Medium High
		Flow Direct	tion: West		Gradient	
					Flat Moderate _	<u>✓</u> Severe
					` ` ` `	(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre Morphology Types	esented by Stream
			r, stream bed dry bed moist		Riffle % Run	%
		Standing			Pool %	
FLOW CHARACTER	ISTICS	Flowing	•			
01111111111111					Turbidity ClearSlightly	turbidTurbid
		Velocity Fast	Moderate		OpaqueStained	
		Slow			Other	
INORGANIC SUBSTRATE C			MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS
		add up to 10		_	does not necessarily add u	-
Substrate	Diame	ter	% Composition in		Characteristic	% Composition in
Туре	Biamo		Sampling Reach	Туре	Ondiadionolio	Sampling Area
Bedrock	. 050	(4011)		Detritus	sticks, wood, coarse plant materials (CPOM)	50
Boulder		mm (10")	10			50
Cobble		m (2.5"-10")	30	Muck-Mud	black, very fine organic (FPOM)	
Gravel		(0.1"-2.5")	15		(ITOM)	
Sand Silt		nm (gritty) 0.06 mm	15	Marl	grey, shell fragments	
Clay		mm (slick)	20 10	IVIAII	grey, shell fragilierits	
Clay	V 0.004 I		ant Surrounding Lar	duso	Indicate the dominant type	(Chook one)
		✓ Forest	Commer		✓ Trees Shrub	
		Field/P	astureIndustria	I	Grasses Herba	ceous
WATEROUER		Agricult	tural Residen	tial	Floodplain Width	
WATERSHED FEATURES		Other:				rate 15-30ft
		Canopy Co	over	Narrow <16ft		
		Partly o	penPartly sh			d NI-
		✓ Shaded Open			Wetland PresentYes Wetland ID	<u>v</u> No
Ir		Indicate th	e dominant type and	d record the o	dominant species present	
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating				
		Floatin	g algae	Attached alga	е	
MACROINVERTEBRATES OR OTHER		Ephemeral	stream drains incised	d draw		
WILDLIFE	THE					
OBSERVED/C OBSERVATION						
NOTES						



Photograph Direction West

STREAM ID S-K59	STREAM NAME UNT to Big Issac Creek
LAT 39.204685 LONG -80.553492	DATE 05/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potriki	us
FLOW REGIME Perennial — Intermittent— Ephemeral —	WATER TYPE TNW — RPW — NRPW ✓

Perennial _	Intermitte	nt Ephem	eral 🗹 TNW	RPW	NRPW <u>~</u>		
			Measurements k Width: 2.5 ft		Stream Erosion None Moderate	₩ Hoove	
			K Widdi.		NoneModerate	<u>-</u> пеаvy	
		Top of Ban	· ·		Artificial, Modified or Char	nnelized	
CHANNEL FEATURES		LB <u>2.5</u>		<u>ft</u>	Yes No		
		Water Dep	th: 0.00 in		Dam Present Yes	4 No	
		Water Widt	th: 0.0 ft		Dam Flesent 165 _	<u></u>	
		High Water	Mark: <u>2.0 ft</u>		Sinuosity <u>v</u> Low	Medium High	
		Flow Direc	tion: West		Gradient		
					Flat Moderate _	✓ Severe	
					` ` ` `	(10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre Morphology Types	sented by Stream	
			r, stream bed dry bed moist		Riffle % Run	%	
		— Standin			Pool %		
FLOW CHARACTER	ISTICS	Flowing	•				
01111111111111					Turbidity ClearSlightly	turbidTurbid	
		Velocity Fast	Moderate		OpaqueStained		
		Slow			Other		
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	IPONENTS	
		add up to 10		_	does not necessarily add u		
Substrate	Diame	ter	% Composition in		Characteristic	% Composition in	
Туре	Diame		Sampling Reach	Туре	Ondradichida	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse	50	
Boulder		mm (10")	10		plant materials (CPOM)	50	
Cobble		m (2.5"-10")	30	Muck-Mud	black, very fine organic		
Gravel		(0.1"-2.5")	15		(FPOM)		
Sand		nm (gritty)	15	Mont			
Silt		0.06 mm	20	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	10	duca		(0)	
		✓ Forest	ant Surrounding Lar Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/P				iceous	
		Agricul	tural Residen	tial	Floridate Width		
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft	
		Canopy Co	over		✓ Narrow <16ft		
		Partly of		aded			
		✓ Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No	
Inc		Indicate th	e dominant type and	d record the d			
AQUATIC VEGETATION		Indicate the dominant type and record the dominant species present Rooted emergentRooted submergent Rooted floating Free floating					
		Floatin	Floating algae Attached algae				
MACROINVERTEBRATES OR OTHER WILDLIFE		Ephemeral	stream drains incised	d draw, eroded			
OBSERVED/C							
NOTES							



Photograph Direction East

STREAM ID S-K60	STREAM NAME UNT to Big Isaac Creek
LAT 39.203838 LONG -80.553183	DATE 05/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us
FLOW REGIME Perennial — Intermittent— Ephemeral	WATER TYPE TNW RPW NRPW ✓

Perennial _	Intermitte	nt Ephem	eral Y TNW —	RPW	NRPW 🛩	
		Top of Ban	Measurements k Width: 4.0 ft		Stream ErosionNoneModerate	Heavy
CHANNEL FEATURES		Top of Ban	ŭ	<u>ft</u>	Artificial, Modified or Char	nnelized
		Water Widt			Dam PresentYes	<u>√</u> No
			Mark: <u>2.5</u> ft		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: West		Gradient	
					FlatModerate (2 ft/100 ft)	✓ Severe (10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Representation Morphology Types	esented by Stream
			bed moist		Riffle % Run	%
FLOW		Standin	•		Pool %	
CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			ClearSlightly	
		Fast Moderate Slow			OpaqueStainedOther	
INOR	GANIC SUB		MPONENTS	0	RGANIC SUBSTRATE COM	/PONENTS
		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	. 050	(40!)		Detritus	sticks, wood, coarse plant materials (CPOM)	F0
Boulder Cobble		mm (10") m (2.5"-10")	10			50
Gravel		(0.1"-2.5")	30 15	Muck-Mud	black, very fine organic (FPOM)	
Sand		nm (gritty)	15		,	
Silt		0.06 mm	20	Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)	10			
			cial I	Indicate the dominant type Trees Shrub Grasses Herba		
WATERSHED FEATURES)	Agricult Other:	tural Residen	tiai		rate 15-30ft
		Canopy Co		✓ Narrow <16ft		
		Partly o		aded	Wetland PresentYes Wetland ID	<u>✓</u> No
AQUATIC VEGETATION Roote		l emergent	d record the c Rooted subme Attached algae	_	tingFree floating	
			<u> </u>			
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES			emeral stream drains i	moderately inc	ised draw. Confluent to road	side ditch.



Photograph Direction NNE

STREAM ID S-A110 / K62	STREAM NAME UNT to Laural Run				
LAT 39.201933 LONG -80.553215	DATE 05/30/2015				
CLIENT MVP	PROJECT NAME MVP				
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us				
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW				

i erennai =	— ппенние	пс— приспи		1X1 VV —		
		Estimate N	/leasurements		Stream Erosion	
		Top of Bank Width: 7.0 ft			None Moderate	Heavy
		Top of Bank Height:				
		LB 1.5	=	ft	Artificial, Modified or Char Yes ✓ No	nnelized
			th: 0.50 in	<u></u>	Yes No	
CHANNEL FE	ATURES	Water Widt			Dam PresentYes _	<u>∠</u> No
			Mark: 4.5 ft		Sinuosity V Low	Medium High
		J	tion: South		<i>,</i>	g
		riow Direc	11011		Gradient Flat Moderate _	✓ Severe
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
			r, stream bed dry bed moist		Morphology Types Riffle 20 % Run 55	%
		✓ Standing			Pool 25 %	,-
FLOW CHARACTER	ISTICS	Flowing			To and the later.	
		Velocity			Turbidity <u>✓</u> ClearSlightly	turbidTurbid
		Fast	Moderate		OpaqueStained	
		✓ Slow			Other	
INOR		SSTRATE COMPONENTS		_	RGANIC SUBSTRATE CON	
Substrate	(Should a	add up to 10	·	1	does not necessarily add u	% Composition in
Type	Diame	ter % Composition in Sampling Reach		Type	Characteristic	Sampling Area
Bedrock			20	Detritus	sticks, wood, coarse	00
Boulder		mm (10")	10		plant materials (CPOM)	20
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel		1 (0.1"-2.5")	10		(ITOM)	
Sand Silt		nm (gritty) 0.06 mm	15	Marl	grey, shell fragments	
Clay		mm (slick)	15 10	Iviaii	grey, shell fragments	
Olay	0.001	` '	ant Surrounding Lar	nduse	Indicate the dominant type	(Check one)
		✓ Forest	Commer		<u>✓</u> Trees Shrub	s
		Field/Pasture Industrial			GrassesHerba	iceous
WATERSHED		Agricult Other:	tural Residen	tiai	Floodplain Width	
FEATURES					Wide > 30ft Mode Narrow <16ft Mode	rate 15-30ft
		Canopy Co		adad	<u>v</u> Narrow < roll	
		Partly openPartly shadedOpen			Wetland Present _v_Yes Wetland ID W-A23	No
		Indicate th	e dominant type and	d record the d	lominant species present	
AQUATIC VE	GETATION	Rooted emergentRooted submergentRooted floatingFree floating				
		Floating	g algae	Attached algae	e 	
		Charmala	maitta at etm 1		stational Desired Control	dan no e d e d
		disperses in	J	ounawater cor	ntributions. Drains to culvert,	under road and
MACROINVE	RTEBRATES	'	paotaro			
OR OTHER WILDLIFE		original S-k	(62			
OBSERVED/C						
OBSERVATION NOTES	UNA GNU					



Photograph Direction North

STREAM ID S-A111	STREAM NAME Laurel Run
LAT 39.200572 LONG -80.554112	DATE 05/30/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SY, KL, RS, WS	
FLOW REGIME Perennial — Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perennial -	<u> </u>	nt Ephem	eral TNW	RPW 🚣	NRPW	
	1		_			
		Estimate Measurements Top of Bank Width: 14.0 ft			Stream ErosionNone ✓ Moderate	Незуу
					NoneNoderate	rieavy
		Top of Ban	· ·		Artificial, Modified or Char	nnelized
				<u>in</u>	Yes No	
CHANNEL FE	ATURES	·	th: 3.00 in		Dam PresentYes _	✓ No
		Water Widt	th: 10.0 ft			
		High Water	Mark: <u>23.0 in</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: West		Gradient	
						Severe (10 ft/100 ft)
		Water Pres	nont.		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	ssented by Stream
		Stream	bed moist		Riffle 15 % Run 45	%
FLOW		Standin	•		Pool 40 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			✓ Clear — Slightly	
		· · · · · · · · · · · · · · · · · · ·	Moderate		OpaqueStained	
		<u>✓</u> Slow		T	Other	
INOR	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			_	RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0		sticks, wood, coarse	1 -
Boulder	> 256	mm (10")	5	Detritus	plant materials (CPOM)	5
Cobble	64-256 m	m (2.5"-10")	(2.5"-10") 15		black, very fine organic	
Gravel	2-64 mm	ı (0.1"-2.5")	30	Muck-Mud	(FPOM)	
Sand	0.06-2n	nm (gritty)	30			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)	10			
			ant Surrounding Lan		Indicate the dominant type	
		Forest Field/P	Commer asture Industrial		✓ Trees — Shrub ✓ Grasses ✓ Herba	
		✓ Agricul			<u> </u>	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
LATORES		Conony C			Narrow <16ft	rate 15-50it
		Canopy Co	over open <u>✓</u> Partly sh	aded	_	
		ShadedOpen			Wetland Present <u>v</u> Yes Wetland ID	No
		Indicate th	e dominant type and	d record the d	dominant species present	
AQUATIC VE	GETATION			Rooted subme		tingFree floating
		Floatin	g algae	Attached alga	е	
MACROINVER OR OTHER	RTEBRATES	•				
WILDLIFE OBSERVED/C	THER					
OBSERVATIO						
NOTES						
		1				



Photograph Direction East

STREAM ID S-J46	STREAM NAME Fink Creek
LAT 39.094756 LONG -80.584879	DATE 05/28/2015
CLIENT MVP	CLIENT MVP
INVESTIGATORS S Ryan, L Harloe, H Heist	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

i cicililai =		nt <u> </u>	erai INVV	RPW —	NRPW —	
		F-414- 1			Ota	
			/leasurements k Width: 15.0 ft		Stream Erosion None ✓ Moderate	Heavy
		·	<u> </u>		Woderate	
		Top of Bank Height:			Artificial, Modified or Char	nnelized
		LB <u>5.0</u>	ft RB <u>5.0</u>	<u>ft</u>	Yes _ <u>✔</u> No	
CHANNEL FE	ATURES	Water Dep	th: 3.00 in		Dam PresentYes _	∠ No
		Water Widt	h: <u>2.5 ft</u>			
		High Water	Mark: 2.0 ft		Sinuosity Low	Medium High
		Flow Direct	tion: SSW		Gradient	
					✓ FlatModerate _	Severe
					,	(10 ft/100 ft)
		Water Pres			Proportion of Reach Representation Morphology Types	esented by Stream
			r, stream bed dry oed moist		Riffle 25 % Run 35	%
		Standing			Pool 35 %	
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	-			
					Turbidity <u>✓</u> ClearSlightly	turbidTurbid
		Velocity Fast	Moderate		OpaqueStained	
		✓ Slow	Woderate		Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	//PONENTS
	(should a	add up to 10	0%)	(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				Dotritus	sticks, wood, coarse	
Boulder	> 256	mm (10")		Detritus	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	25	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	20	Wuck-Wuu	(FPOM)	
Sand	0.06-2n	nm (gritty)	20			
Silt	0.004-0	0.06 mm	20	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	15			
			ant Surrounding Lan		Indicate the dominant type	(Check one)
		— Forest	Commer		Trees Shrub	
		<u>✓</u> Field/Pa			Grasses Herba	iceous
WATERSHED		Other:		iidi	Floodplain Width	
FEATURES		_			✓ Wide > 30ft Mode Narrow <16ft	rate 15-30ft
		Canopy Co			Narrow < roll	
		Partly open Shaded Open			Wetland Present <u>✓</u> Yes	No
					Wetland ID w-k33	
401147101/5					dominant species present	line Franklantine
AQUATIC VE	EIAIION	Floating	_	Rooted subme Attached algae	_	tingFree floating
				/ titaorica aiga		
MACPOINVE	TERDATES					
MACROINVERTEBRATES OR OTHER						
WILDLIFE OBSERVED/C	THER					
OBSERVATIO NOTES						
110120						



Photograph Direction East

STREAM ID S-J47b	STREAM NAME UNT to Fink Creek
LAT 39.094248 LONG -80.585486	DATE 05/28/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Hart, D. Santillo, J. Potrik	us
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

Perenniai _	intermitte	nt <u> </u>	erai INVV	RPW <u> </u>	NRPW —		
		Estimate N	/leasurements		Stream Erosion		
		Top of Bank Width: 3.0 ft			None Moderate	Heavy	
		Top of Bank Height:					
		LB 1.5 ft RB 3.0 ft			Artificial, Modified or Char Yes ✓ No	nnelizea	
			th: 0.50 in	<u>-</u>	163110		
CHANNEL FE	ATURES	Water Widt			Dam PresentYes _	<u>∠</u> No	
					Sinuosity Low	Medium High	
		ŭ	Mark: <u>3.0 ft</u>		onidosity v Low	wedidiri riigiri	
		Flow Direct	tion: North		Gradient	4.0	
						✓ Severe (10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	,	
			r, stream bed dry		Morphology Types	-	
			bed moist		Riffle 40 % Run 40 Pool 20 %	%	
FLOW		Standing Flowing	•		Pool 20 %		
CHARACTER	ISTICS	<u>v</u> i lowing	water		Turbidity		
		Velocity			✓ ClearSlightly		
		Fast Moderate			OpaqueStainedOther		
		✓ Slow					
INOR	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			_	RGANIC SUBSTRATE CON 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")		Delilius	plant materials (CPOM)	25	
Cobble	64-256 m	m (2.5"-10")	20	Muck-Mud	black, very fine organic		
Gravel	2-64 mm	1 (0.1"-2.5")	20	WIGON-WIGG	(FPOM)		
Sand	0.06-2n	nm (gritty)	10				
Silt	0.004-0	0.06 mm	25	Marl	grey, shell fragments		
Clay	< 0.004 i	mm (slick)	25				
		Predomina Forest	ant Surrounding Lan Commer		Indicate the dominant type Trees✓ Shrub	(Check one)	
		Field/Pa			Grasses Herba		
		Agricult		tial	<u> </u>		
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Model	rate 15-30ft	
1 2711 01120		Canany C	over.		✓ Narrow <16ft	rate 10 ook	
		Canopy Co <u>✓</u> Partly of		haded			
		Shaded	Open		Wetland Present _v_Yes Wetland ID W-K34	—No	
		Indicate th	e dominant type and	d record the d			
AQUATIC VE	GETATION	Indicate the dominant type and record the dominant species presentRooted emergentRooted submergentRooted floatingFree floating					
Floating alg		g algae	Attached alga	e			
			•		wetland (W-K34), then throu	ugh culvert and	
		•	s confluent to S-K46.	Moderately in	cised channel.		
MACROINVER OR OTHER	RTEBRATES						
WILDLIFE OBSERVED/C	THER						
OBSERVATIO							
NOTES							
		Ī					



Photograph Direction NW

STREAM ID S-164	STREAM NAME	Leading Creek
LAT 39.052754 LONG -80.582176	DATE 05/19/201	5
CLIENT MVP	CLIENT	MVP
INVESTIGATORS G. Stevens, S. Townsend, S.	S. Therkildson	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW	RPW 💆 NRPW

i eleliliai =	_ 11110111111110	nt <u> — Epnem</u>	erai INVV —	RPW —	NRPW —	
			_			
					Stream Erosion	Носули
		·			NoneModerate	<u> —</u> пеаvy
		Top of Ban	_		Artificial, Modified or Char	nnelized
		LB <u>2.5</u>	ft RB <u>2.5</u>	<u>ft</u>	Yes _ <u>✓</u> No	
CHANNEL FE	ATURES	Water Dep	th: 3.50 in		Dam PresentYes _	∠ No
		Water Widt	h: 3.0 ft		Dani Flesent les _	<u>/ No</u>
		High Water	Mark: <u>2.0 ft</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: SW		Gradient	
					<u>✓</u> FlatModerate _	Severe
					`	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
			ped moist		Riffle 50 % Run 40	%
EL OW		Standing	g water		Pool 10 %	
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turkiditu	
		Velocity			Turbidity <u>✓</u> ClearSlightly	turbidTurbid
		Fast	Moderate		✓ OpaqueStained	
		✓ Slow			Other	
INOR		STRATE CO		0	RGANIC SUBSTRATE CON	MPONENTS
	(should a	add up to 10	0%)	(c	loes 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	> 256	mm (10")		Dounted	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")		Muck-Mud	black, very fine organic	30
Gravel	2-64 mm	(0.1"-2.5")	25		(FPOM)	30
Sand		nm (gritty)	20			
Silt		0.06 mm	25	Marl	grey, shell fragments	
Clay	< 0.004 i	mm (slick)	30			
		Predomina Forest	ant Surrounding Lan Commer	iduse rcial	Indicate the dominant type Trees Shrub	
		Field/P		l	✓ Grasses ✓ Herba	
		✓ Agricult	tural Resident	tial	_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
		Canopy Co	over		Narrow <16ft	
			ppen <u>v</u> Partly sh	aded	W 4 15 4 V	
		Shaded Open			Wetland Present _v_Yes Wetland ID W-122	No
		Indicate th	e dominant type and		lominant species present	
AQUATIC VE	GETATION					
Floating algae			g algae	Attached algae	e	
		Frogs, son	gbirds, few macroinve	erts		
MACROINVER OR OTHER	RTEBRATES					
WILDLIFE	THE					
OBSERVED/C OBSERVATION						
NOTES						
1						



Photograph Direction East

STREAM ID S-KK03a	STREAM NAME UNT to Laurel Run
LAT 39.01916 LONG -80.597938	DATE 08/14/2015
CLIENT EQT	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck A. Hatfield (C. Carver
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW <u>✓</u>

Perennial _	_ Intermitte	nt Ephem	eral 🖍	TNW	RPW —	NRPW 💆	
		Estimate Measurements				Stream Erosion	
		Top of Bank Width: 2.0 ft				<u>✓ None</u> Moderate	Heavy
		Top of Bank Height:				Artificial, Modified or Char	nnalizad
		LB <u>0.5 ft</u> RB <u>0.5</u> f			ft	✓ Yes No	menzed
0114111151 55	ATUREO	Water Dep	– th: 0.00				
CHANNEL FE	ATURES	Water Widt				Dam PresentYes _	<u>∠</u> No
		High Water				Sinuosity Low	Medium High
		-		2.0 1		<u> </u>	
		Flow Direc	tion: S			Gradient	4.0
							✓ Severe (10 ft/100 ft)
		Water Pres	sent			Proportion of Reach Repre	` '
		✓ No wate		bed dry		Morphology Types	-
			bed mois	t		Riffle % Run	%
FLOW		Standin	•			Pool %	
CHARACTER	ISTICS	Flowing	water			Turbidity	
		Velocity				ClearSlightly	
		Fast	Mod	erate		OpaqueStained	
		Slow			Other		
INORGANIC SUBSTRATE COMPONENTS		NTS	_	RGANIC SUBSTRATE COM			
	(should a	add up to 10			,	does not necessarily add u	<u>, , , , , , , , , , , , , , , , , , , </u>
Substrate Type	Diame	ter		mposition in pling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock					Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	30)	Detritae	plant materials (CPOM)	50
Cobble	64-256 m	m (2.5"-10")	5"-10") 10		Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	10)	Widok Wida	(FPOM)	
Sand	0.06-2mm (gritty)		5				
Silt	0.004-0	0.06 mm	20)	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	25				
			ant Surr	ounding Lan		Indicate the dominant type	
		Forest	actura	Commer Industrial		✓ Trees Shrub Grasses Herba	os aceous
		Field/PastureIndustrial Agricultural Residen			Orassesrierba	locous	
WATERSHED		Other:				Floodplain Width	
FEATURES						Wide > 30ft Mode ✓ Narrow <16ft Mode	rate 15-30ft
					adad	- Narrow Tolt	
		Partly openPartly shadedOpen			aueu	Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e domir	nant type and	d record the o	dominant species present	
AQUATIC VE	GETATION	Rooted	l emerge	ent	Rooted subme	ergentRooted float	tingFree floating
		Floatin	g algae		Attached alga	е	
MACROINVER OR OTHER	RTEBRATES						
WILDLIFE	THE						
OBSERVED/C							
NOTES							



Photograph Direction South

STREAM ID S-KK05	STREAM NAME UNT to Laurel Run
LAT 39.018134 LONG -80.596398	DATE 08/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck A. Hatfield (C. Carver
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai =	_ 11116111111116	nt <u> —</u> Epnem	erai INVV —	RPW —	NRPW —	
			_			
		Estimate Measurements Top of Bank Width: 3.0 ft			Stream Erosion ✓ None Moderate	Незуу
		•			VIVOICIVIOGETALE	ricavy
		Top of Ban	-	r.	Artificial, Modified or Char	nnelized
		LB <u>1.0</u>		<u>ft</u>	<u>✓</u> YesNo	
CHANNEL FE	ATURES	·	th: 3.00 in		Dam PresentYes _	✓ No
		Water Widt	h: 1.5 ft			
		High Water	Mark: <u>3.0 ft</u>		Sinuosity Low	Medium <u>v</u> High
		Flow Direct	tion: W		Gradient	
					FlatModerate _	
		14/ (5			(0.5/100 ft (2 ft/100 ft)	,
		Water Pres	sent r, stream bed dry		Proportion of Reach Representation Morphology Types	esented by Stream
			ped moist		Riffle 10 % Run 80	%
FLOW		Standing	g water		Pool 10 %	
CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			✓ ClearSlightly	turbidTurbid
			Moderate		OpaqueStained	
		✓ Slow			Other	
INOR		STRATE CO			RGANIC SUBSTRATE CON	
0.1.1.1	(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				Detritus	sticks, wood, coarse	
Boulder		mm (10")		2011.100	plant materials (CPOM)	20
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic	
Gravel		1 (0.1"-2.5")	50		(FPOM)	
Sand		nm (gritty)	10			
Silt		0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	10			
		Predomina ✓ Forest	ant Surrounding Lar Commer	iduse rcial	Indicate the dominant type Trees Shrub	
		Field/P		l	Grasses Herba	
		Agricult		tial	_	
WATERSHED FEATURES		Other:		Floodplain Width Wide > 30ft Moderate 1		rate 15-30ft
		Canony Co	over		✓ Narrow <16ft	
		Canopy Cover ✓ Partly open Partly sh		naded Wetland PresentYes ✔ No		
		Shaded	Open		Wetland ID	<u>v</u> No
		Indicate th	e dominant type and	d record the d	Iominant species present	
AQUATIC VE	GETATION	Rooted	l emergent	Rooted subme		tingFree floating
		Floating	g algae	Attached algae	e	
		Feeds into	Laurel Run. Traverse	s along from ro	padside before trending towa	ards S-KK07
	MACROINVERTEBRATES OR OTHER WILDLIFE					
WILDLIFE						
OBSERVED/C						
NOTES						
		1				



Photograph Direction East

STREAM ID S-KK06	STREAM NAME UNT to Laurel Run
LAT 39.017568 LONG -80.596496	DATE 08/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck A. Hatfield (C. Carver
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

Perenniai 🗕	_ memilie	nt <u> — Epnem</u>	erai INW —	RPW —	NRPW —		
	1						
			leasurements "		Stream Erosion		
		Top of Ban	Top of Bank Width: 3.0 ft		<u>✓</u> None Moderate	Heavy	
		Top of Ban	Top of Bank Height:		Artificial, Modified or Chai	nnelized	
		LB <u>1.0</u>	ft RB <u>1.0</u>	f.	✓ Yes No		
CHANNEL FE	ATHRES	Water Dep	th: 3.00 in				
CHANNEL FE	ATURES	Water Widt	h: 1.5 ft		Dam PresentYes	<u>∠</u> No	
			Mark: 3.0 ft		Sinuosity Low	Medium ✓ High	
						_ 3	
		Flow Direct	uon: _vv		Gradient <u>✓</u> Flat Moderate _	Sovere	
					(0.5/100 ft (2 ft/100 ft)		
		Water Pres	sent		Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types	·	
		_	oed moist		Riffle 10 % Run 80	%	
FLOW		— Standing	•		Pool 10 %		
CHARACTER	ISTICS	Flowing	water		Turbidity		
		Velocity			✓ Clear — Slightly		
			Moderate		OpaqueStained		
		<u></u> ✓ Slow			Other		
INOR		STRATE CO		_	RGANIC SUBSTRATE COM loes not necessarily add u		
Substrate	`	· · · · · · · · · · · · · · · · · · ·	% Composition in	,		% Composition in	
Туре	Diame	eter	Sampling Reach		Characteristic	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse	00	
Boulder		mm (10")			plant materials (CPOM)	20	
Cobble	64-256 m	m (2.5"-10")	20	Muck-Mud	black, very fine organic		
Gravel		n (0.1"-2.5")	50		(FPOM)		
Sand	0.06-2n	nm (gritty)	10				
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments		
Clay	< 0.004 i	mm (slick)	10				
			ant Surrounding Lar	iduse	Indicate the dominant type	(Check one)	
		✓ Forest Field/Pa	Commer asture Industria		Trees Shrub Grasses Herba		
		Agricult			Grasses nerba	iceous	
WATERSHED		Other:			Floodplain Width		
FEATURES		_			Wide > 30ft Mode ✓ Narrow <16ft Mode	rate 15-30ft	
		Canopy Co	over		<u>v</u> Narrow < roll		
		<u>✓</u> Partly of Shaded	. — <u> </u>	aded	Wetland Present _v_Yes	No	
		— Shaded	OpenOpen		Wetland ID w-кко6		
					lominant species present		
AQUATIC VE	GETATION		_	Rooted subme	<u> </u>	tingFree floating	
		Floating	Floating algaeAttached algae				
		I e	Laurel Don				
MACROINVERTEBRATES OR OTHER WILDLIFE		reeds into	Laurel Run.				
		5					
OBSERVED/C OBSERVATION							
NOTES							
		1					



Photograph Direction NE

STREAM ID S-KK07	STREAM NAME Laurel Run
LAT 39.017605 LONG -80.597075	DATE 08/14/2015
CLIENT EQT	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck A. Hatfield (C. Carver
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

Perennial 4	Intermitte	nt Ephem	eral TNW	RPW 💆	NRPW	
			_			
			/leasurements k Width: <u>6.0</u> ft		Stream Erosion ✓ NoneModerate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Char	nelized
		LB <u>1.5</u>	ft RB <u>1.0</u>	<u>ft</u>	✓ Yes No	monzou
CHANNEL FE	ATURES	Water Dep	th: 6.00 in			. N.
0134442212	, o	Water Widt	th: 3.0 ft		Dam PresentYes _	<u>∠</u> No
		High Water	Mark: <u>6.0 ft</u>		Sinuosity Low	Medium 🔽 High
		Flow Direc	tion: W		Gradient	
					<u>✓</u> FlatModerate _	Severe (10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types	0/
		Stream	bed moist		Riffle 20 % Run 60 Pool 20 %	%
FLOW CHARACTER	ISTICS	Standing	•		70	
CHARACTER	131103				Turbidity Clear ✓ Slightly	turbidTurbid
		Velocity Fast	✓ Moderate		Clear Slightly Stained	
		Slow	Woderate		Other	
INOR		STRATE CO			RGANIC SUBSTRATE COM	
Substrate	`	· · · · · · · · · · · · · · · · · · ·	% Composition in	Substrate		% Composition in
Type	Diame	ter	Sampling Reach	Type	Characteristic	Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")	5	2011.100	plant materials (CPOM)	25
Cobble		m (2.5"-10")	30	Muck-Mud	black, very fine organic	
Gravel		1 (0.1"-2.5")	30		(FPOM)	
Sand Silt		nm (gritty)	5		gray aball fragments	
Clay		0.06 mm mm (slick)	25 5	Marl	grey, shell fragments	
Clay	10.0041		ant Surrounding Lan	duse	Indicate the dominant type	(Check one)
		<u>✓</u> Forest		cial	✓ Trees Shrub	
		— Field/P			Grasses Herba	iceous
WATERSHED		Agriculi Other:	tural Resident	tial	Floodplain Width	
FEATURES		Canopy Cover				rate 15-30ft
				Narrow <16ft		
		✓ Partly open Partly shaded Shaded Open			Wetland PresentYes Wetland ID	<u>~</u> No
		Indicate th	e dominant type and	d record the d	lominant species present	
AQUATIC VE	GETATION	Rooted emergentRooted submergentRooted floatingFree floating				
		Floatin	g algae	Attached algae	9	
MACROINVERTEBRATES						
OR OTHER WILDLIFE	OR OTHER					
OBSERVED/C						
OBSERVATIO NOTES	UNA GNU					
		1				



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

STREAM ID S-K45	STREAM NAME UNT to Cove Lick
LAT 39.002425 LONG -80.59564	DATE 05/19/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Bensted, V. Prilepin, J. Bit	tner
FLOW REGIME Perennial — Intermittent— Ephemeral ✓	WATER TYPE TNW RPW NRPW ✓

Perennial _	Intermitte	nt Ephem	eral ✓ TNW —	RPW	NRPW <u>✓</u>	
			Measurements k Width: 1.0 ft		Stream Erosion V None Moderate	Heavy
		Top of Ban	k Height:	i.a.	Artificial, Modified or Cha	nnelized
				<u>in</u>	Yes _ <u>✓</u> No	
CHANNEL FEATURES		Water Dep	th: <u>1.00 in</u>		Dam PresentYes	<u>∕</u> No
			Mark: <u>1.0 ft</u>		Sinuosity ✓ Low	Medium High
		Flow Direct			Gradient	
						Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types Riffle % Run	%
		Stream I			Pool 100 %	70
FLOW CHARACTER	ISTICS	Flowing	water			
OHARAGIER	101100				Turbidity ✓ Clear — Slightly	turbidTurbid
		Velocity Fast	Moderate		OpaqueStained	
		Slow			Other	
INOR	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			_	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		mm (10")		Detritus	plant materials (CPOM)	5
Cobble		m (2.5"-10")		Muck-Mud	black, very fine organic	
Gravel	l	(0.1"-2.5")	30		(FPOM)	
Sand	l	nm (gritty)	35		anne all for any anti-	
Silt		0.06 mm	5	Marl	grey, shell fragments	
Clay	V 0.004 I	mm (slick)	30 ant Surrounding Lan	duos	Indicate the dominant type	(Chack and)
		✓ Forest	Commer		Trees Shrub	
		✓ Field/P			✓ Grasses Herba	iceous
WATERSHED	,	Agricult	tural Residen	tial	Floodplain Width	
FEATURES		Other:		Wide > 30ft Moderate 15-30ft		rate 15-30ft
		Canopy Co	over		Narrow <16ft	
		Partly open Partly shaded Open			Wetland PresentYes Wetland ID	<u>√</u> No
					dominant species present	
AQUATIC VEGETATION			_	Rooted subme		tingFree floating
				Allacried algae	<u> </u>	
				, ,,		
					ata collected in 2015. The st nnel and OHWM was confirm	
MACROINVER	RTEBRATES		•			
OR OTHER WILDLIFE						
OBSERVED/C						
NOTES	AIL					



Photograph Direction North

Date: 05/19/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 09/24/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-K43	STREAM NAME Cove Lick
LAT 39.002050 LONG -80.596017	DATE 05/19/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Bensted, V. Prilepin, J. Bit	tner
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW

Perennial -	Intermitte	nt Ephem	eral TNW	RPW –	NRPW	
		Estimate Measurements Top of Bank Width: 7.0 ft			Stream Erosion None ✓ Moderate	Незуу
					NoneNoderate	rieavy
		Top of Ban	· ·		Artificial, Modified or Char	nnelized
		LB <u>4.0</u>	_	<u>π</u>	Yes No	
CHANNEL FE	ATURES	·	th: 1.00 ft		Dam Present Yes	✓ No
		Water Widt	h: 4.0 ft			_
		High Water	Mark: <u>7.0 ft</u>		Sinuosity Low	Medium <u>✓</u> High
		Flow Direct	tion: West		Gradient	
					Flat	
		Water Pres	cont		Proportion of Reach Repre	, ,
			r, stream bed dry		Morphology Types	ssented by Stream
		Stream I	ped moist		Riffle 70 % Run 10	%
FLOW		Standing	•		Pool 20 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			ClearSlightly	
			Moderate		OpaqueStained	
		<u>✓</u> Slow		ı	Other	
INOR		STRATE CO add up to 10	MPONENTS 0%)		RGANIC SUBSTRATE CON does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition ir Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")		Delilius	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	40	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	25	Widok Wida	(FPOM)	
Sand		nm (gritty)	15			
Silt		0.06 mm	5	Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)	15			
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
		_	asture Industrial		Grasses Herba	
l		Agricult	tural Resident	tial	_	
WATERSHED FEATURES		Other:		Floodplain Width ✓ Wide > 30ft Moderate 15-30ft		rate 15-30ft
		Canony Co	over		Narrow <16ft	
		Canopy Cover <u>✓</u> Partly open Partly sh		aded Western Breezest Ves (No.		
		ShadedOpen			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and	d record the d	lominant species present	
AQUATIC VE	GETATION	Rooted emergentRooted submergentRooted floatingFree floating				
		Floating	g algae	Attached algae	e	
		Stream me	anders within wide flo	odplain on val	ley floor.	
MACDO::::::	TERRA					
MACROINVER OR OTHER	KIEBKATES					
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES						
NOTES						
		1				



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

STREAM NAME UNT to Rock Run
DATE 05/17/2015
PROJECT NAME MVP
tner
WATER TYPE TNW — RPW — NRPW ✓

Perennial _	Intermitte	nt Ephem	eral 🗹 TNW	RPW	NRPW 🚩	
			/leasurements k Width: 3.0 ft		Stream Erosion ✓ None Moderate	Ноэм
		·			<u>✓</u> NoneModerate	пеачу
		Top of Ban	ŭ		Artificial, Modified or Char	nelized
		LB <u>1.0</u>		<u>ft</u>	<u>✓</u> YesNo	
CHANNEL FE	ATURES	Water Dep	th: 0.00 in		Dam Present Yes	4 No
		Water Widt	h: <u>0.0 ft</u>		Dalli Fleselli les _	<u>/ NO</u>
		High Water	Mark: 3.0 ft		Sinuosity Low	Medium High
		Flow Direct	tion: W		Gradient	
					Flat Moderate _	✓ Severe
					` '	(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre Morphology Types	sented by Stream
			r, stream bed dry bed moist		Riffle % Run	%
		— Standing			Pool %	
FLOW CHARACTER	ISTICS	Flowing	•			
01344010121					Turbidity ClearSlightly	turbidTurbid
		Velocity Fast	Moderate		OpaqueStained	
		Slow	Woderate		Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	/PONENTS
		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			30	Detritus	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")	10	Detilius	plant materials (CPOM)	15
Cobble	64-256 m	m (2.5"-10")	20	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	20	Waok Waa	(FPOM)	
Sand	0.06-2n	nm (gritty)	20			
Silt	0.004-0	0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)				
			ant Surrounding Lar		Indicate the dominant type ✓ Trees Shrub	
		Forest Field/Pa	Commer asture Industria		✓ Trees Shrub Grasses Herba	
		— Agricult		tial		00000
WATERSHED FEATURES		Other:	_	Floodplain Width Wide > 30ft Moderate 15-30		rata 15 20ft
FEATURES					Narrow <16ft	ale 15-3011
		Canopy Cover <u>✓</u> Partly open Partly sha				
		-	Shaded Open Wetland Present Yes No Wetland ID			<u>✓</u> No
		Indicate the dominant type and record the dominant species present				
AQUATIC VE	GETATION		_	Rooted subme Attached algae	_	tingFree floating
			y algae	Allacried alga-	<u> </u>	
		Otro a real base				
MACROINVERTEBRATES OR OTHER		Sueam beg	gins at culvert under p	aveu road.		
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES						
.10120						



Photograph Direction East

STREAM ID S-163	STREAM NAME Sand Fork
LAT 38.969345 LONG -80.593157	DATE 05/16/2015
CLIENT MVP	CLIENT MVP
INVESTIGATORS SET SJC GS	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

i cicililai =	_ 11110111111110	nt <u> — Epnem</u>	erai INVV —	RPW —	NRPW —	
			_			
		Estimate Measurements			Stream Erosion None ✓ Moderate	Носули
		Top of Bank Width: 20.0 ft			None _v Moderate	<u> —</u> пеаvy
		Top of Ban	-		Artificial, Modified or Char	nnelized
		LB <u>3.0</u>	ft RB <u>4.0</u>	<u>ft</u>	<u>✓</u> Yes No	
CHANNEL FE	ATURES	Water Dep	th: 18.00 in		Dam PresentYes _	∠ No
		Water Widt	h: 12.0 ft		Dani Flesent les _	<u>/ No</u>
		High Water	Mark: <u>2.0 ft</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: W		Gradient	
					<u>✓</u> FlatModerate _	Severe
					, ,	(10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
			ned moist		Riffle 25 % Run 60	%
EL OW		Standing	g water		Pool 15 %	
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turkiditu	
		Velocity			Turbidity Clear Slightly	turbidTurbid
		Fast	Moderate		✓ OpaqueStained	
		✓ Slow			Other	
INOR		-	MPONENTS	0	RGANIC SUBSTRATE CON	MPONENTS
	(should a	add up to 10			loes 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	> 256	mm (10")		Betritas	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	45	Muck-Mud	black, very fine organic	10
Gravel	2-64 mm	(0.1"-2.5")	10	Waak Waa	(FPOM)	10
Sand	0.06-2n	nm (gritty)				0
Silt		0.06 mm	45	Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)				
			ant Surrounding Lar	nduse	Indicate the dominant type ✓ Trees Shrub	
		✓ ForestCommer Field/PastureIndustrial Agricultural Resident		l		iceous
				tial	ial	
WATERSHED FEATURES		<u>✓</u> Other:	Road on right bank, b	oat laun	Floodplain Width ✓ Wide > 30ft Mode	rate 15-30ft
		Canopy Cover ✓ Partly open Partly sha			Narrow <16ft	1410 10 0011
				naded		
		ShadedOpen			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and			
AQUATIC VEGETATION		Indicate the dominant type and record the dominant species present Rooted emergentRooted submergent Rooted floating Free floating				
		Floatin	Floating algae Attached algae			
N		Many macr	oinverts, songbirds, b	outterflies		
MACROINVER OR OTHER	RTEBRATES					
WILDLIFE	THE					
OBSERVED/C						
NOTES						



Photograph Direction <u>SW</u>

Comments:

STREAM ID S-H160	STREAM NAME Indian Fork
LAT 38.93322 LONG -80.584445	DATE 05/19/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Stott, A.Grech, D. McCullo	pugh
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW NRPW

Perennial	<u> </u>	nt <u> </u>	eral TNW	RPW <u></u>	NRPW	
		F - 41 4 - 8			Oto	
		Estimate Measurements Top of Bank Width: 23.0 ft			Stream Erosion None Moderate Heavy	
		Top of Bank Height:			_	-
		LB 4.0	ŭ	r.	Artificial, Modified or Channelized	
			th: 6.00 in	'' .	<u>✓</u> YesNo	
CHANNEL FE	ATURES	Water Widt			Dam PresentYes _	<u>∕</u> No
			Mark: 1.5 ft		Sinuosity Low 🗸	Medium High
		J				Triigit
		Flow Direc	tion: West		Gradient <u>✓</u> Flat Moderate _	Severe
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
		No wate Stream	r, stream bed dry		Morphology Types Riffle 50 % Run 25	%
		Standin			Pool 25 %	70
FLOW CHARACTER	ISTICS	Flowing	•		T	
		Velocity			Turbidity <u>✓</u> ClearSlightly	turbidTurbid
			✓ Moderate		OpaqueStained	
		Slow			Other	
INOR			MPONENTS	_	RGANIC SUBSTRATE COM	
Substrata	(snoula a	add up to 10	,	`	loes not necessarily add u	<u>, , , , , , , , , , , , , , , , , , , </u>
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	_
Boulder		mm (10")	5		plant materials (CPOM)	5
Crovel		m (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel Sand		nm (gritty)	25		(i i oiii)	
Silt		0.06 mm	50	Marl	grey, shell fragments	
Clay		mm (slick)		. Man	groy, onon magmonto	
		. ,	ant Surrounding Lar	ıduse	Indicate the dominant type	(Check one)
		Forest	Commer	cial	Trees Shrub	s
		Field/PastureIndustrial			<u>✓</u> Grasses Herba	iceous
WATERSHED		Agricultural Resident Other:			Floodplain Width	
FEATURES		Canopy Cover Partly open Partly sha			Wide > 30ft v Mode Narrow <16ft	rate 15-30ft
				aded		
		Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No
					lominant species present	
AQUATIC VE	GETATION			Rooted subme Attached algae	<u> </u>	tingFree floating
		FIOALIII	y alyae	Allacrieu algae		
		In nooture				
MACROINVERTEBRATES		In pasture				
OR OTHER WILDLIFE	OR OTHER					
OBSERVED/C						
NOTES	מווא טווי					



Photograph Direction West

STREAM ID S-L76	STREAM NAME Indian Fork			
LAT 38.929649 LONG -80.575173	DATE 05/19/2015			
PROJEC MVP	CLIENT MVP			
INVESTIGATORS Sean Kite, Ashley Hatfield				
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW			

Estimate Measurements Top of Bank Width: 15.0 ft Top of Bank Width: 15.0 ft RB 4.0 ft Yes None Moderate Heavy	Perenniai 🛂	<u> </u>	ntEphem	eral <u> </u>	RPW <u>▼</u>	NRPW	
Top of Bank Height: Top of Bank Height: Top of Bank Height: Artificial, Modified or Channelized YesNo Water Public 5.00 in Water Width: 1.0.0 ft High Water Mark: 1.0.0 ft High Water Present No water, stream bed dry Stream bed moist Stream bed moist Stream bed dry Stream Moderate Standing water How Characteristics Turbidity Velocity FastNowell water Water Present Slow Uelocity FastNowell water Water Present Norganic Substrate Slow Uelocity FastNowell water Water Present Slow Uelocity FastNowell water Water Present Norganic Substrate Slow Uelocity FastNowell water Water Present Slow Uelocity FastNowell water Water Present Norganic Substrate Slow Uelocity FastNowell water Water Present Slow Uelocity FastNowell water Water Present Norganic Substrate Slow Uelocity FastNowell water Slow Substrate S	-	1		_			
Top of Bank Height: LB 3.0 ft RB 4.0 ft Water Depth: 5.00 in Water Depth: 5.00 in Water Depth: 5.00 in Water Depth: 5.00 in Water Width: 10.0 ft High Water Mark: 1.0 ft Flow Direction: NW Flow Water Stream bed dry Stream Morphology Types Standing water Fresent Flowing water F							
CHANNEL FEATURES LB 3.0 ft RB 4.0 ft Yes No Water Openth: 5.00 in Water Width: 10.0 ft High Water Mark: 1.0 ft Flow Direction: NW Flow Direction:						None _v Noderate	Tleavy
Water New Width: 10.0 ft High Water Width: 10.0 ft High Water Mark: 1.0 ft Sinuosity Low Medium High Water Mark: 1.0 ft Sinuosity Cardiont Flow Direction: MW Flow Direction: Moderate Severe (10 ft/100 ft) Flow Direction: Moderate Severe (10 ft/100 ft) Flow Direction: Moderate Severe Moderate Severe Moderate Standing water Flowing wat			•	•		Artificial, Modified or Char	nnelized
Water Width: 10.0 ft High Water Mark: 1.0 ft High Water Water Mark: 1.0 ft High Water Water Mark: 1.0 ft High Water Wa					<u>tt</u> .	✓ YesNo	
High Water Mark: 100 ft High Water Mark: 100 ft Flow Direction: MW	CHANNEL FE	ATURES	Water Dep	th: <u>5.00 in</u>		Dam Present Yes	∠ No
Flow Direction: NW			Water Widt	h: 10.0 ft			
Water Present			High Water	Mark: <u>1.0 ft</u>		Sinuosity Low _✓	Medium High
Water Present			Flow Direct	tion: NW		Gradient	
Water Present							
No water, stream bed dry Stream bed moist Standing water Pool 20 % Run 70 %			Water Dree				
FLOW CHARACTERISTICS Stream bed moist Standing water Pool 20 % Run 70 % Run 70 % Pool 20 % Pool							esented by Stream
Clay						Riffle 10 % Run 70	%
Velocity	FLOW					Pool 20 %	
Velocity		ISTICS	<u>√</u> Flowing	water		Turbidity	
Slow			Velocity			✓ ClearSlightly	
NORGANIC SUBSTRATE COMPONENTS (should add up to 100%) Substrate (should add up to 100%) Substrate (Type Diameter % Composition in Sampling Reach Type Characteristic % Composition in Sampling Reach Type Characteristic % Composition in Sampling Reach Type Characteristic % Composition in Sampling Area Sampling Reach Type Characteristic % Composition in Sampling Area Sticks, wood, coarse plant materials (CPOM) Sticks, wood, coarse plant materials (CPOM) Sampling Area Sticks, wood, coarse plant materials (CPOM) Sticks, wood, coarse plant m				✓ Moderate			
Substrate Type Diameter Sampling Reach Substrate Type Detritus Substrate Sampling Reach Type Characteristic Sampling Agrea Sticks, wood, coarse plant materials (CPOM) Sand 0.06-25 mm (2.5"-10") 10 Muck-Mud black, very fine organic (FPOM) Sand 0.06-2mm (gritty) 30 Marl grey, shell fragments Clay < 0.004 mm (slick)			Slow			Other	
Substrate Type Bedrock Boulder	INOR						
Bedrock Sampling Reach Type Characteristic Sampling Area	Substrate	<u> </u>	•	, '	,		· · · · · · · · · · · · · · · · · · ·
Boulder > 256 mm (10") Detritus plant materials (CPOM) Cobble 64-256 mm (2.5"-10") 10 Muck-Mud Detritus Detritus Detritus Plant materials (CPOM) Gravel 2-64 mm (0.1"-2.5") 50 Muck-Mud Detritus Detritus Detritus Detritus Detritus Detritus Plant materials (CPOM) Sand 0.06-25 mm (gritty) 30 Marl Grey, shell fragments Clay < 0.004 mm (slick) Marl Grey, shell fragments Clay < 0.004 mm (slick) Marl Grey, shell fragments Forest Commercial Trees Shrubs Trees Tr	_	Diame	ter			Characteristic	
Cobble 64-256 mm (2.5"-10") 10 Gravel 2-64 mm (0.1"-2.5") 50 Sand 0.06-2mm (gritty) 30 Silt 0.004-0.06 mm 20 Clay < 0.004 mm (slick) Predominant Surrounding Landuse			(4011)		Detritus		
Gravel 2-64 mm (0.1"-2.5") 50 Muck-Mud (FPOM) Sand 0.06-2mm (gritty) 30 Silt 0.004-0.06 mm 20 Marl grey, shell fragments Clay < 0.004 mm (slick) Predominant Surrounding Landuse Forest Commercial Trees Shrubs Agricultural Residential Grasses Herbaceous Floadplain Width Wide > 30ft Marl Grasses Herbaceous Floadplain Width Wide > 30ft Marrow <16ft Wetland Present Yes Ves No Wetland ID Indicate 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 09/26/2019. The presence of a stream channel and OHWM was confirmed.	ł		. ,			, , ,	
Sand 0.06-2mm (gritty) 30 Silt 0.004-0.06 mm 20 Clay < 0.004 mm (slick) Predominant Surrounding Landuse					Muck-Mud		
Silt	ł — — — — — — — — — — — — — — — — — — —					(I FOIVI)	
Clay			10 17		Morl	grov shall fragments	
WATERSHED FEATURES Predominant Surrounding Landuse	ł — — — — — — — — — — — — — — — — — — —			20	IVIAIT	grey, shell fragilierits	
WATERSHED FEATURES - Forest Commercial Trees Shrubs - Jeidl/Pasture Industrial Grasses Herbaceous - Agricultural Residential - Other: Agricultural Residential - Other: Wide > 30ft Moderate 15-30ft - Narrow <16ft - Narrow <16ft - Partly open Partly shaded Narrow <16ft - Partly open Partly shaded Yopen	Clay	V 0.004 I		nt Surrounding Lan	ndusa	Indicate the dominant type	(Check one)
WATERSHED FEATURES WATERSHED FEATURES Agricultural Residential Residential Residential Residential Residential Residential Residential Residential Partly wide > 30ft Moderate 15-30ft Narrow <16ft Narrow <16ft Partly open Partly shaded Yes✓ No No No				Commer	cial		
The stream was revisited on this form represents the data collected in 2015. The stream was revisited on 09/26/2019. The presence of a stream channel and OHWM was confirmed. Wattershed Wide > 30ft Moderate 15-30ft Narrow <16ft				astureIndustria	I		iceous
Teatures Canopy CoverPartly openPartly shadedYes _✓_NoYes _✓_No	WATERSHED				tial	Floodplain Width	
Partly openPartly shadedYesYesNo			Other:			√ Wide > 30ft Mode	rate 15-30ft
Partly openPartly shaded Open			Canopy Co	over		Narrow <16ft	
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 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			Partly o	pen Partly sh	aded Wetland Present Yes ✓ No.		√ No
AQUATIC VEGETATION Rooted emergent Attached algae Rooted floating Free floating Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			Shaded Open				<u></u>
Floating algae Attached algae Attached algae Information listed on this form represents the data collected in 2015. The stream was revisited on 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND							
Information listed on this form represents the data collected in 2015. The stream was revisited on 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND				_	tingFree floating		
on 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			Floating	y algae	Allacried algae		
on 09/26/2019. The presence of a stream channel and OHWM was confirmed. MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND			1				
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND							
OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND	MACROINVE	RTERRATES		oro. The presence of	a stream chan	iner and Orrevier was commit	icu.
OBSERVED/OTHER OBSERVATIONS AND	OR OTHER	.,					
	OBSERVED/C						
	OBSERVATION						
	1.0.2						

Stream ID S-L76



Photograph Direction SE

Date: 05/19/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 09/26/2019

STREAM ID S-H153	STREAM NAME UNT to Bens Run
LAT 38.922846 LONG -80.579226	DATE 05/18/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Stott, A.Grech, D. McCullo	ough
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW

Perennial _	Intermitte	ntEphem	eral TNW_		NRPW		
			Measurements k Width: 15.0 ft		Stream Erosion None ✓ Moderate	Heavv	
		Top of Ban	k Height:	•	Artificial, Modified or Char	·	
CHANNEL FE	ATURES	Water Dep	th: <u>3.00 in</u>		Dam Present Yes	<u>√</u> No	
		High Water	Mark: <u>9.0</u> in		Sinuosity Low	Medium High	
		Flow Direct	tion: West			Severe (10 ft/100 ft)	
FLOW CHARACTERISTICS		Water Pres No wate Stream I Standing Flowing	r, stream bed dry bed moist g water		Proportion of Reach Represe Morphology Types Riffle 75 % Run Pool 25 % Turbidity	,	
		Velocity Fast Moderate ✓ Slow			Clear Slightly Opaque Stained Other		
INOR	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock	> 250	(40!)	20	Detritus	sticks, wood, coarse plant materials (CPOM)	15	
Boulder Cobble		mm (10") m (2.5"-10")	20 15		black, very fine organic	13	
Gravel	2-64 mm	(0.1"-2.5")	15	Muck-Mud	(FPOM)		
Sand	l	nm (gritty)	40				
Silt		0.06 mm	10	Marl	grey, shell fragments		
Clay	< 0.004 r	nm (slick)	 ant Surrounding Lan	4	Indicate the densire and turns	(Observe)	
WATERSHED		✓ Forest Field/Pa Agricult	Commer astureIndustrial	⁻ cial I tial	Indicate the dominant type Trees Shrub Grasses Herba Floodplain Width	os	
FEATURES		Other: Canopy Cover			Wide > 30ft Mode Narrow <16ft	rate 15-30ft	
		✓ Partly open Partly shaded Shaded Open			Wetland PresentYes Wetland ID	<u>√</u> No	
AQUATIC VEGETATION Indicate the dominant type and record the dominant type			ergentRooted float	tingFree floating			
		1					
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES		on 10/01/20			ata collected in 2015. The st inel and OHWM was confirm		
İ							

Stream ID S-H153



Photograph Direction East

Date: 05/18/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 10/01/2019

STREAM ID S-H145	STREAM NAME UNT to Indian Fork
LAT 38.918992 LONG -80.573839	DATE 05/18/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Stott, A.Grech, D. McCullo	pugh
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW

Perennial _	Intermitte	ntEphem	eral TNW_	RPW <u>√</u>	NRPW	
		Estimate N	/leasurements		Stream Erosion	
		Top of Bank Width: 15.0 ft			None/ Moderate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Cha	nnelized
		LB 5.0	ft RB <u>6.0</u>	ft	Yes ✓ No	illelized
		Water Dep	th: 3.00 in		<u> </u>	
CHANNEL FE	ATURES	Water Widt			Dam PresentYes	<u>√</u> No
			Mark: <u>1.0 ft</u>		Sinuosity Low ✓	Medium High
		_			<u> </u>	
		Flow Direct	tion: Northeast		Gradient	Carrana
					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 I			Riffle 75 % Run	%
FLOW		Standing	•		Pool 25 %	
CHARACTER	ISTICS	✓ Flowing	water		Turbidity	
		Velocity			ClearSlightly	
			✓ Moderate		OpaqueStained	I
		Slow			Other	
INOR		-	MPONENTS	_	RGANIC SUBSTRATE COM	
	(should a	add up to 10	, .	,	does not necessarily add u	<u> </u>
Substrate Type	Diame	ter	% Composition Sampling Rea		Characteristic	% Composition in Sampling Area
Bedrock			5	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	10	Detritus	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	30	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	35	Widok Widd	(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)				
			ant Surrounding		Indicate the dominant type	
		✓ Forest Commer Field/Pasture Industrial			✓ Trees — Shrub Grasses ✓ Herba	
		Agricultural Residenti				100003
WATERSHED		Other:	_		Floodplain Width Wide > 30ft Moderate 15-30ft Varrow <16ft	
FEATURES						
		Canopy Co		, shaded	- Nariow Tole	
			Partly openPartly shadedOpen		Wetland PresentYes Wetland ID	_✓_No
		Indicate th	e dominant type	and record the d	dominant species present	
AQUATIC VEGETATIONRooted emerg			ū	Rooted subme		tingFree floating
Floating algae At			Attached alga	е		
		_				
					lata collected in 2015. The st	
MACROINVERTEBRATES OR OTHER			019. The presence	e of a stream char	nnel and OHWM was confirm	ied.
WILDLIFE	TUED					
OBSERVED/C						
NOTES						
		I				

Stream ID S-H145



Photograph Direction SW

Date: 05/18/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 10/01/2019

STREAM ID S-H165	STREAM NAME UNT to Indian Fork
LAT 38.918722 LONG -80.573270	DATE 05/19/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A.Stott, A.Grech, D. McCullo	ough
FLOW REGIME Perennial Intermittent Ephemeral ✓	WATER TYPE TNW RPW NRPW_✓

Perennial		entEpheme	eral ✓ TNW	RPW	NRPW <u></u> ✓		
	!		Measurements		Stream ErosionNone ✓ Moderate	Цоом	
	ļ		k Width: 6.0 ft		NUILE _✓ INIUGEI ALE	<u> —</u> пеаvy	
	!	Top of Bank	•		Artificial, Modified or Char	nnelized	
	ļ	LB <u>8.0</u>	<u>in</u> RB <u>5.0</u>	<u>in</u> .	Yes _ <u>✓</u> No		
CHANNEL FE	ATURES	Water Dept	th: <u>0.00 in</u>		Daniel Voc	/ Na	
		Water Widtl	h: 0.0 ft		Dam PresentYes	<u>/ No</u>	
	!	High Water	r Mark: 2.0 in		Sinuosity ✓ Low	Medium High	
	ļ	Flow Direct	tion: Northwest		Gradient		
	1				Flat Moderate _	✓ Severe	
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	sented by Stream	
			er, stream bed dry		Morphology Types Riffle % Run	%	
	!	✓ Stream b			Pool %	70	
FLOW	ICTICS	Flowing v	-		,,,		
CHARACTERI	151165		wate.		Turbidity		
		Velocity			Clear Slightly Opaque Stained	turbidTurbid	
	1	Fast _ Slow	Moderate		Other		
11105		_		1 01			
INUK	INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)				ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate		-	% Composition in			% Composition in	
Туре	Diame	ter	Sampling Reach	Туре	Characteristic	Sampling Area	
Bedrock				Dotritue	sticks, wood, coarse		
Boulder	> 256	mm (10")	5	Detritus	plant materials (CPOM)	50	
Cobble	64-256 m	nm (2.5"-10")	5	Musk Mud	black, very fine organic		
Gravel	2-64 mm	n (0.1"-2.5")	10	- Muck-Mud	(FPOM)		
Sand	0.06-2r	mm (gritty)	20				
Silt	0.004-0	0.06 mm	60	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)					
			ant Surrounding Lan	nduse	Indicate the dominant type		
1	1	✓ Forest			✓ Trees — Shrub		
1	1		astureIndustrial turalResident		GrassesHerba	iceous	
WATERSHED	, !	Agricuit Other:	.ulaii.coido	llai	Floodplain Width		
FEATURES	1				Wide > 30ft Mode	rate 15-30ft	
1	1		Canopy Cover		✓ Narrow <16ft		
1	!	Partly o		aded	Wetland PresentYes	<u>√</u> No	
		<u>√</u> Silaucu	✓ Shaded Open Wetland ID				
	· - : -: -:				Iominant species present	. Franklanting	
AQUATIC VEGETATION			Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae				
<u> </u>			j algae	Attached algae			
		т —					
					ata collected in 2015. The str		
144 CDOINVE			J19; no stream chann	iel or Ohvvivi w	vere observed within the cons	Struction LOD.	
MACROINVER OR OTHER	(TERKATES	'					
WILDLIFE OBSERVED/O	THER						
OBSERVATIO							
NOTES							
1							

Stream ID S-H165



Photograph Direction SE

Date: 05/19/2015

Comments: 2015 stream identification.



Photograph Direction NW

Date: 10/01/2019

STREAM ID S-CV3			STREAM NA	STREAM NAME Threelick Run			
CLIENT MV	Р			PROJECT NAME MVP			
LAT 38.9134		ONG -80.57185			COUNTY Lewis		
INVESTIGAT	ORS CV, I	(P					
TNW		NRPW [FLOW REG Perennial		ent Ephemeral		
		Estimate Mea	asurements		Sinuosity Low 🗸 l	Medium High	
		Top of Bank V Top of Bank H	Width: 6.0 ft Height:		Gradient Flat (0.5/100 ft) Moderate Severe (10 ft/100 ft) (2 ft/100 ft) (10 ft/100 ft)		
		LB 3.0 ff		it	Stream Erosion None ✓ Moderate	Heavv	
	Water Depth: 3.				Artificial, Modified or Chan	_ ,	
CHANNEL FE	ATURES	Water Width:_			Yes V No		
			Water Mark (Width):		Within Roadside Ditch		
		, ,	Water Mark (Height)	: <u>8.0</u> in	Yes <u>✓</u> No	1	
		Flow Direction	n: Southwest	-	Culvert Present <u>✓</u> Yes		
					Culvert Material: Corrugated		
					Culvert Material: Corrugated Culvert Size: 36 in		
		Water Preser			Proportion of Reach Repres	sented by Street	
FLOW CHARACTERISTICS No water, stream Stream bed mois Standing water Flowing water Velocity		stream bed dry d moist vater		Morphology Types (Only ente Riffle 20 % Run 50 Pool 30 %	er if water present)		
		<u>′</u> Moderate		Turbidity <u>✓</u> ClearSlightly toOther	urbidTurbid		
INCE	OCANIC CI	IRSTRATE CO	MPONENTS		RGANIC SUBSTRATE COM	IDONENTO	
INOR	(GANIC S	JESTRATE CO	MI OILLINIO	_	ACAMIC SUBSTRATE CUM	IPUNEN I S	
		ld add up to 100	0%) 100	(does not necessarily add u	p to 100%)	
Substrate Type	(shou			(does not necessarily add u	p to 100%)	
Substrate Type Bedrock	(should Dia	Id add up to 100 meter	9%) 100 % Composition in	Substrate	Characteristic sticks, wood, coarse	p to 100%) % Composition in	
Substrate Type Bedrock Boulder	(shoul	Id add up to 100 meter 56 mm (10")	9%) 100 % Composition in	Substrate Type	does not necessarily add u	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble	(should be	meter 56 mm (10") 6 mm (2.5"-10")	% Composition in Sampling Reach	Substrate Type	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble Gravel	Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	% Composition in Sampling Reach 30 15	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM)	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shoul Dia	meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty)	% Composition in Sampling Reach 30 15	Substrate Type Detritus Muck-Mud	characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM)	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Should Dia	meter 56 mm (10") 6 mm (2.5"-10") 7 mm (0.1"-2.5") 7 -2mm (gritty) 04-0.06 mm	% Composition in Sampling Reach 30 15 15	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shoul Dia	meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") -2mm (gritty) 104-0.06 mm 104 mm (slick)	% Composition in Sampling Reach 30 15 10 30 c Surrounding LandutureIndustrial	Substrate Type Detritus Muck-Mud Marl	characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments	p to 100%) % Composition in	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shoul Dia	### Total Process ### Agricultura #### Agricultura #### Total Process #### Agricultura #### Total Process ##################################	% Composition in Sampling Reach 30 15 15 10 30 Surrounding Landu — Commercial ture — 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 Floodplain Width Wide > 30ft Modera	p to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shoul 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 Agricultura ROW Canopy Cove Open	% Composition in Sampling Reach 30 15 15 10 30 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	p to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dia	Id add 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 ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 30 15 15 10 30 Surrounding Landu — Commercia — Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl use	characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	p to 100%) % Composition in Sampling Area	
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dia	Id add 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 ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 30 15 15 10 30 Surrounding Landu — Commercia — Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl use	characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft	p to 100%) % Composition in Sampling Area	



Photograph Direction SW

011(27(01)12	STREAM ID S-CD16		STREAM NA	STREAM NAME UNT to Second Big Run			
CLIENT MVI	Р		PROJECT N				
LAT 38.90403		ONG -80.563694			COUNTY Lewis		
INVESTIGATO	ORS HBS	CV					
WATER TYPE	WATER TYPE TNW RPW NRPW NRPW			IME Intermi	ttent		
		Estimate Meas	surements		Sinuosity Low	Medium High	
			/idth: 8.0 ft eight:	ft	Gradient Flat	oderate Severe (100 ft) (10 ft/100 ft)	
				"	Stream Erosion ✓ None Moderate	Heavy	
	Water Depth: 1.0				Artificial, Modified or Chan	_	
CHANNEL FE	ATURES	Water Width:		0.5. #	✓ Yes No		
		, ,	Water Mark (Width):		Within Roadside Ditch		
			Water Mark (Height)	: _3.0_ in	✓ YesNo)	
		Flow Direction:	South	-	Culvert PresentYes		
					Culvert Material:		
					Culvert Size: in	· · · · · · · · · · · · · · · · · · ·	
Water Present			<u> </u>		Proportion of Reach Repres	sented by Stream	
No water, stream Stream bed mois			ream bed dry		Morphology Types (Only enter Riffle % Run 10	er if water present)	
FLOW	FLOW Standin				Pool %		
CHARACTERISTICS Flowing water			er		Turbidity		
	Velocity				✓ ClearSlightly t	urbidTurbid	
		Fast <u> </u>	Moderate		Other		
		Slow					
	-	JBSTRATE COM d add up to 100	%) 100	(does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrat Type	e Characteristic	% Composition in Sampling Area	
					atialia iliana anama		
Bedrock				Detritus	sticks, wood, coarse		
Boulder		66 mm (10")		Detritus	plant materials (CPOM)		
Boulder Cobble	64-256	mm (2.5"-10")		Detritus Muck-Muck	plant materials (CPOM) black, very fine organic		
Boulder Cobble Gravel	64-256 2-64 r	mm (2.5"-10") nm (0.1"-2.5")	10		plant materials (CPOM)		
Boulder Cobble Gravel Sand	64-256 2-64 r 0.06	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty)	0	Muck-Muc	plant materials (CPOM) black, very fine organic (FPOM)		
Boulder Cobble Gravel Sand Silt	64-256 2-64 r 0.06	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm			plant materials (CPOM) black, very fine organic		
Boulder Cobble Gravel Sand Silt Clay	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick)	0 90 Surrounding Landu Commercia ure Industrial	Muck-Muc Marl	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width	ate 15-30ft	
Boulder Cobble Gravel Sand Silt	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick) Predominant 9 Forest Field/Pastu	0 90 Surrounding Landu Commercia ure Industrial	Muck-Muc Marl	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	ate 15-30ft	
Boulder Cobble Gravel Sand Silt Clay	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 14 mm (slick) Predominant 9 Forest Field/Pastu Agricultural	0 90 Surrounding Landu Commercia Industrial Residential VOther: Dirt	Muck-Muc Mari Ise al	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	ate 15-30ft	
Boulder Cobble Gravel Sand Silt Clay	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 14 mm (slick) Predominant 9 Forest Field/Pastu Agricultural ROW Canopy Cover	0 90 Surrounding Landu Commercia Industrial Residential VOther: Dirt	Muck-Muc Mari Ise al	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera	ate 15-30ft	
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm	0 90 Surrounding Landu Commercia Industrial Residential VOther: Dirt Partly shade	Muck-Muck Marl Ise al road	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera		
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm -4 mm (slick) Predominant s Forest Field/Pastu Agricultural ROW Canopy Cover Open Shaded	0 90 Surrounding Landu	Muck-Muck Marl Ise al road ed	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft OTHER NOTES AND OBSER		
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm -4 mm (slick) Predominant s Forest Field/Pastu Agricultural ROW Canopy Cover Open Shaded	0 90 Surrounding Landu Commercia Industrial Residential VOther: Dirt Partly shade	Muck-Muck Marl Ise al road ed	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft OTHER NOTES AND OBSER		
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm -4 mm (slick) Predominant s Forest Field/Pastu Agricultural ROW Canopy Cover Open Shaded	0 90 Surrounding Landu	Muck-Muck Marl Ise al road ed	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft OTHER NOTES AND OBSER		
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm -4 mm (slick) Predominant s Forest Field/Pastu Agricultural ROW Canopy Cover Open Shaded	0 90 Surrounding Landu	Muck-Muck Marl Ise al road ed	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft OTHER NOTES AND OBSER		
Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	64-256 2-64 r 0.06 0.00 < 0.00	mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm -4 mm (slick) Predominant s Forest Field/Pastu Agricultural ROW Canopy Cover Open Shaded	0 90 Surrounding Landu	Muck-Muck Marl Ise al road ed	plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ft Modera Narrow <15ft OTHER NOTES AND OBSER		



Photograph Direction South

					D: D	
STREAM ID S				ME Second	Big Run	
LAT 38.90396	⁷ LON	G -80.56355				
CLIENT MVP			PROJECT N	AME MVP		
INVESTIGATO	RS J. McGu	ıirk, K. Pulver				
WATER TYPE	RPW 🔽	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral	
		Estimate Measurements Top of Bank Width: 15.0 ft			Stream Erosion None ✓ Moderate	Heavv
		Top of Bank Height:				·
			ft RB 3.0 f	·+	Artificial, Modified or Char	nnelized
			th: <u>3.00 in</u>	<u>.</u>	Yes No	
CHANNEL FE	ATURES				Dam Present Yes _	<u>∠</u> No
		Water Widt		L) 400 #	Sinuosity 🗸 Low	Medium High
		,	igh Water Mark (Widt	,	Omdosity <u>v</u> Low	riigii
		,	igh Water Mark (Heig	ht): <u>1.0 π</u>	Gradient ✓ Flat Moderate _	Covera
		Flow Direct	tion: Southwest		✓ Flat Moderate (2 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types Riffle 35 % Run 45	5 %
			oed moist		Riffle 35 % Run 45 Pool 20 %) %
FLOW CHARACTERI	STICS	Standing water Flowing water			20	
OHARAGIER	01100	_			Turbidity <u>✓</u> ClearSlightly	turbid Turbid
		Velocity Fast Moderate			OpaqueStained	
		✓ Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS
	(should a	add up to 10		(0	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		mm (10")	10		plant materials (CPOM)	5
Cobble		m (2.5"-10")	45	Muck-Mud	black, very fine organic (FPOM)	
Gravel Sand		(0.1"-2.5")	35		(ITON)	
Silt		nm (gritty) 0.06 mm	5	Marl	grey, shell fragments	
Clay		mm (slick)	5	IVICIT	grey, shell fragilierits	
Ciay	1 0.00 1 1		l ant Surrounding Lan	duse	Indicate the dominant type	<u> </u>
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub	
		— Field/Pa			Grasses Herba	ceous
WATERSHED		Agricult Other:	tural Resident	iiai	Floodplain Width	
FEATURES		00101.				rate 15-30ft
		Canopy Co		- 4 - 4	— Narrow <16ft	
		Open Shaded	<u>✓</u> Partly sh	aded	Wetland PresentYes Wetland ID	<u>✓</u> No
					dominant species present	
AQUATIC VEC	SETATION		-	Rooted subme Attached alga		tingFree floating
			y algae	Allacrieu alga	Е	
MACROINVER	RTEBRATES					
OR OTHER WILDLIFE						
OBSERVED/O						
OBSERVATIO NOTES	INO AND					



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

	STREAM ID S-VV11 STREAM NAME UNT to Second Big Run						
STREAM ID S					Second Big Run		
LAT 38.90337	8 LON	IG -80.56293					
CLIENT MVP			PROJECT N	AME MVP			
INVESTIGATORS J. McGuirk, K. Pulver							
WATER TYPE TNW	RPW	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral 🗸		
		Estimate Measurements Top of Bank Width: 4.0 ft			Stream Erosion ✓ None Moderate	Heavv	
		Top of Bank Height:			<u> </u>		
		-	_	ı.	Artificial, Modified or Char	nnelized	
		LB <u>1.0</u>		<u>t</u>	Yes No		
CHANNEL FE	ATURES	·	th: <u>0.00 in</u>		Dam PresentYes _	✓ No	
		Water Widt					
		•	igh Water Mark (Widt	,	Sinuosity 🔽 Low	Medium mgm	
		,	igh Water Mark (Heig	ht): <u>1.0 in</u>	Gradient Madarata	0	
		Flow Direct	ion: North			Severe (10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	·	
			r, stream bed dry		Morphology Types	-	
		Stream I			Riffle % Run Pool %	%	
FLOW CHARACTERI	CTICE	— Standing	-		70		
CHARACIEN	31163	_			Turbidity Clear Slightly	turbid Turbid	
		Velocity Fast Moderate			Clear Slightly Stained		
		Slow	Moderate		Other		
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	MPONENTS	
-		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				Detritus	sticks, wood, coarse	05	
Boulder		mm (10")	60		plant materials (CPOM)	65	
Cobble		m (2.5"-10")	10	Muck-Mud	black, very fine organic		
Gravel		1 (0.1"-2.5")	5		(FPOM)		
Sand		nm (gritty)	5	NAI	arran all from onto		
Silt		0.06 mm	15	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	5 ant Surrounding Lan	qued	Indicate the dominant type	`	
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub		
		Field/Pa	astureIndustrial			iceous	
WATERSHED		Agricult	tural Resident	tial	Floodplain Width		
FEATURES		Other:			Wide > 30ftMode	rate 15-30ft	
		Canopy Co	over		Narrow <16ft		
		Open	Partly sh	aded	Wetland PresentYes	✓ No	
		<u>✓</u> Shaded	1		Wetland ID		
					dominant species present		
AQUATIC VEC	SETATION		_	Rooted subme Attached alga		tingFree floating	
			g algae	Allacried alga	<u> </u>		
MACROINVER	RTEBRATES	;					
OR OTHER WILDLIFE							
OBSERVED/O							
OBSERVATIO NOTES	NS AND						



Photograph Direction South

STREAM ID S					Second Big Run	
LAT 38.90342		G -80.56349				
CLIENT MVP			PROJECT N	AME MVP		
INVESTIGATO	DRS J. McGu	ıirk, K. Pulver				
TNW	RPW 🔽	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral	
_		= timesta N			O: Finalian	
			fleasurements k Width: <u>12.0 ft</u>		Stream Erosion ✓ None Moderate	Heavv
		Top of Bank Width: 12.0 %			- -	,
			ft RB 3.5 f	+	Artificial, Modified or Char	nnelized
				<u>.</u>	Yes No	
CHANNEL FE	ATURES		th: 3.00 in		Dam Present Yes _	<u>∕</u> No
		Water Widt		L) 400 #	Sinuosity 🗸 Low	Medium High
		•	igh Water Mark (Widt	,		riigii
		,	igh Water Mark (Heig	ht): <u>1.0 π</u>	Gradient Madarata	A Covere
		Flow Direct	tion: West		<u>✓</u> Flat Moderate (2 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types	0/
			bed moist		Riffle 50 % Run 40 Pool 10 %) %
FLOW CHARACTERI	CTICC	Standing water Flowing water			. 66. 10 /6	
CHARACTERI	31103	_			Turbidity ✓ ClearSlightly	turbid Turbid
		Velocity Fast Moderate			Opaque Stained	
		✓ Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE COM	IPONENTS
	(should a	add up to 10	0%) 100	(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")	10		plant materials (CPOM)	5
Cobble		m (2.5"-10")	30	Muck-Mud	black, very fine organic (FPOM)	
Gravel		(0.1"-2.5")	40		(FPOIVI)	
Sand Silt		nm (gritty) 0.06 mm	10	Marl	grav aball fragments	
Clay		mm (slick)	10	IVIAII	grey, shell fragments	
Clay	< 0.0041		l ant Surrounding Lan	duse	Indicate the dominant type	<u> </u>
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub	
		Field/Pa			GrassesHerba	ceous
WATERSHED		Agricult Other:	tural Resident	tial	Floodplain Width	
FEATURES		Other.				rate 15-30ft
		Canopy Co			— Narrow <16ft	
		Open Shaded	<u>✓</u> Partly sh	aded	Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th			dominant species present	
AQUATIC VEC	SETATION		-	Rooted subme		tingFree floating
		Floating	g algae	Attached alga	<u> </u>	
		 				
MACROINVER	TEDDATES					
OR OTHER	VIEDKAIE3					
WILDLIFE OBSERVED/O						
OBSERVATIO NOTES	NS AND					



Photograph Direction West

STREAM ID S-VV13d		STREAM NA	STREAM NAME Second Big Run			
CLIENT MVI			PROJECT N	AME MVP		
LAT 38.90256	69 <u>L</u>	ONG -80.56489	7 DATE 06/09/	/2016	COUNTY Lewis	
INVESTIGATO	ors HBS	, CV				
TNW	RPW [NRPW	FLOW REG Perennial	IME Intermitte	ent Ephemeral	
CHANNEL FE	ATURES	Top of Bank H LB 3.0 ft Water Depth: Water Width: Ordinary High Ordinary High Flow Direction	Vidth:12.0ft Height: The RB2.5ft The State of the State	ft s	Flat	/100 ft) (10 ft/100 ft) Heavy nelized /
FLOW CHARACTERISTICS Water Present No water, stream Stream bed mois Standing water Flowing water Velocity Fast Slow No water			tream bed dry I moist vater	M F F	Proportion of Reach Repres Morphology Types (Only ente Riffle 70 % Run 20 Pool 10 % Furbidity ClearSlightly to _Other	er if water present) %
INORGANIC SUBSTRATE COMPO						
INOR	-			_	RGANIC SUBSTRATE CON	
Substrate Type	(shou	UBSTRATE COI Id add up to 100 meter		_	RGANIC SUBSTRATE CON loes not necessarily add u Characteristic	p to 100%)
Substrate	(shou	ld add up to 100	% Composition in	Substrate Type	Characteristic sticks, wood, coarse	p to 100%) % Composition in
Substrate Type	(shou	meter 56 mm (10")	% Composition in	Substrate	Characteristic	p to 100%) % Composition in
Substrate Type Bedrock Boulder Cobble	(shou) Dia > 29 64-256	meter 56 mm (10") 6 mm (2.5"-10")	% Composition in Sampling Reach	Substrate Type	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in
Substrate Type Bedrock Boulder Cobble Gravel	Shou Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5")	% Composition in Sampling Reach 10 30 20	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM)	p to 100%) % Composition in
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shou Dia	meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") 7 -2mm (gritty)	% 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
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dia	meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm	% Composition in Sampling Reach 10 30 20	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shou Dia	meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") 7 mm (gritty) 64-0.06 mm 7 d mm (slick)	% Composition in Sampling Reach 10 30 20 40 Surrounding Landu — Commercia — Industrial — Residential — Other: Acce	Substrate Type Detritus Muck-Mud Marl Ise F Il ess road	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments	p to 100%) % Composition in
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 Agricultura ROW Canopy Cove Open	% Composition in Sampling Reach 10 30 20 40 Surrounding Landu — Commercia — Industrial — Residential — Vother: Acce	Substrate Type Detritus Muck-Mud Marl Ise F Il ess road	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments cloodplain Width Wide > 30ft Modera	p to 100%) % Composition in Sampling Area



Photograph Direction NE

STREAM ID S					Second Big Run		
LAT 38.90020	0 LON	IG -80.56330					
CLIENT MVP			PROJECT N	AME MVP			
INVESTIGATORS J. McGuirk, K. Pulver							
WATER TYPE	RPW 🔲	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral		
				'			
		Estimate Measurements			Stream Erosion		
		Top of Ban	k Width: 3.0 ft		<u>✓ None</u> Moderate	Heavy	
		Top of Ban	k Height:		Artificial, Modified or Char	nelized	
		LB <u>1.0</u>	<u>ft</u> RB <u>1.0</u> <u>f</u>	<u>'t</u>	Yes _ <u>✔</u> No		
CHANNEL FE	ATURES	Water Dept	th: <u>0.00 in</u>		Dam Brosont Vos	. No	
		Water Widt	th:_0.0ft_		Dam PresentYes	NO	
		Ordinary H	igh Water Mark (Widt	h): <u>24.0 i</u> n	Sinuosity <u>v</u> Low	Medium High	
		Ordinary H	igh Water Mark (Heig	ht): <u>1.0 in</u>	Gradient		
		Flow Direct	tion: Northwest		Flat Moderate _	Severe	
					, , ,	(10 ft/100 ft)	
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	sented by Stream	
		Stream I	•		Riffle % Run	%	
FLOW		Standing	g water		Pool %		
	CHARACTERISTICS		water		Turbidity		
		Velocity			ClearSlightly	turbidTurbid	
		-	Moderate		OpaqueStained		
		Slow			Other		
INOR				RGANIC SUBSTRATE CON does not necessarily add u			
Substrate	Diame	itor	% Composition in	Substrate	Characteristic	% Composition in	
Туре	Diame	:161	Sampling Reach	Type	Characteristic	Sampling Area	
Bedrock		(. = II)		Detritus	sticks, wood, coarse	15	
Boulder		mm (10")	50		plant materials (CPOM)	15	
Cobble		m (2.5"-10")	15	Muck-Mud	black, very fine organic (FPOM)		
Gravel		(0.1"-2.5")	15		(11 OW)		
Sand Silt		nm (gritty)	10	Marl	grav aball fragments		
<u> </u>		0.06 mm	10	IVIAII	grey, shell fragments		
Clay	< 0.004	mm (slick)	l ant Surrounding Lan	dusa	Indicate the dominant type		
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub		
		Field/Pa			Grasses Herba	ceous	
WATERSHED		Agricult	tural Resident	tial	Floodplain Width		
FEATURES		Other:			Wide > 30ftMode	rate 15-30ft	
		Canopy Co	over		Narrow <16ft		
		Open	Partly sh	aded	Wetland PresentYes	✓ No	
		<u>✓</u> Shaded			Wetland ID		
					lominant species present		
AQUATIC VEC	SETATION	_	-	Rooted submo		ingFree floating	
		Floating	g algae	Allacrieu alya			
		1					
MACROINVER	TEDDATES						
OR OTHER	DIVATES						
WILDLIFE OBSERVED/O							
OBSERVATIO	NS AND						



Photograph Direction NW

STREAM ID S					Second Big Run			
LAT 38.89921	9 LON	G -80.56379						
CLIENT MVP			PROJECT N	AME MVP				
INVESTIGATO	INVESTIGATORS J. McGuirk, K. Pulver							
WATER TYPE	RPW _	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral 🗸			
		F-timata N	#		Otrace Francis			
			/leasurements k Width: 3.0 ft		Stream Erosion ✓ None Moderate	Heavv		
		Top of Bank Height:				•		
		-	ft RB <u>1.0</u> f	ft	Artificial, Modified or Char	nnelized		
			th: <u>0.00 in</u>	<u> </u>	Yes No			
CHANNEL FE	ATURES	Water Widt			Dam PresentYes	<u>∠</u> No		
			in. <u>0.0 it.</u> igh Water Mark (Widtl	h\ 24 ∩ in	Sinuosity <u>v</u> Low	Medium High		
		•	igh Water Mark (Heig	,		•		
		,	tion: Northwest	111.j. <u>1.0</u>	Gradient Flat ✓ Moderate	Severe		
		FIOW DITCO	IIII. <u>INGRAINECE</u>			(10 ft/100 ft)		
		Water Pres			Proportion of Reach Repre	esented by Stream		
		No wate Stream I	r, stream bed dry		Morphology Types Riffle % Run	%		
l		Standing			Pool %	,,		
FLOW CHARACTERI	STICS	Flowing	-					
		— Velocity			Turbidity ClearSlightly	turbid Turbid		
		•	Moderate		OpaqueStained			
		Slow			Other			
INOR					RGANIC SUBSTRATE COM does not necessarily add u			
Substrate	•		% Composition in	Substrate		% Composition in		
Type	Diame	ter	Sampling Reach	Type	Characteristic	Sampling Area		
Bedrock				Detritus	sticks, wood, coarse			
Boulder		mm (10")	40	Donnac	plant materials (CPOM)	15		
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic			
Gravel		(0.1"-2.5")	20		(FPOM)			
Sand		nm (gritty)	10		1. 11.6			
Silt		0.06 mm	10	Marl	grey, shell fragments			
Clay	< 0.004	mm (slick)	Currounding Lan	-ادمم	In digete the dominant type			
		redomina <u>✓</u> Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub			
		Field/Pa	astureIndustrial		_	ceous		
WATERSHED		Agricult	tural Resident	tial	Floodplain Width			
FEATURES		Other:				rate 15-30ft		
		Canopy Co	over		Narrow <16ft			
		Open	Partly sh	aded	Wetland PresentYes	No		
		<u></u> ✓ Shaded	d		Wetland ID			
					dominant species present			
AQUATIC VEC	SETATION		-	Rooted submo		tingFree floating		
			y algae	Allacried alga	<u> </u>			
MACROINVER	RTEBRATES							
OR OTHER WILDLIFE								
OBSERVED/O								
OBSERVATIO NOTES	NS AND							



Photograph Direction NNW

STREAM ID S-VV13b			STREAM NA	STREAM NAME Second Big Run			
CLIENT MV	P		PROJECT N	PROJECT NAME MVP			
LAT 38.89892	27 <u>L</u> (ONG -80.56808	DATE 06/09	2016	COUNTY Lewis		
INVESTIGATO	ORS HBS,	KMM					
WATER TYPE		NRPW	FLOW REG Perennial		ent Ephemeral		
		Estimate Mea	asurements		Sinuosity Low I	Medium ✓ High	
	Top of Bank Width Top of Bank Heigh LB <u>3.0</u> ft Water Depth: <u>4</u> .			_	Gradient Flat ✓ Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) Stream Erosion		
	Water Depth: 4.0				_	-	
CHANNEL FE	ATURES	Water Width:_	3.0 ft		Artificial, Modified or Chan		
		Ordinary High	n Water Mark (Width):		✓ YesNo)	
		Ordinary High	n Water Mark (Height)	: <u>7.0</u> in	Within Roadside Ditch		
		Flow Direction	n: East	_	YesNo		
					Culvert Present _ Yes		
					Culvert Material: Corrugated	Metal	
					Culvert Size: 54 in		
Water PresentNo water, streamStream bed moisStanding water CHARACTERISTICS Water PresentNo water, streamStream bed moisStanding water ✓ Flowing water Velocity			stream bed dry d moist vater		Proportion of Reach Repres Morphology Types (Only ente Riffle 40 % Run 50 Pool 10 % Turbidity	er if water present)	
					✓ ClearSlightly to	urbidTurbid	
	Fast Mod				Other		
		Slow					
INORGANIC SUBSTRATE COMPO			MDONENTS		SOCIALIO CUDOTO ATE COM		
I				_	DRGANIC SUBSTRATE CON	-	
Substrate	(shoul	d add up to 10	0%) 100 % Composition in	Substrate	does not necessarily add u	p to 100%) % Composition in	
Туре	(shoul	d add up to 10	0%) 100	(does not necessarily add u	p to 100%)	
Type Bedrock	(shoul	d add up to 100	9%) 100 % Composition in Sampling Reach	Substrate	Characteristic sticks, wood, coarse	p to 100%) % Composition in	
Type Bedrock Boulder	Dian > 25	d add up to 100 meter 56 mm (10")	0%) 100 % Composition in Sampling Reach	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM)	p to 100%) % Composition in	
Type Bedrock	Shoul Dian > 25 64-256	meter 66 mm (10") 7 mm (2.5"-10")	% Composition in Sampling Reach	Substrate Type	Characteristic sticks, wood, coarse	p to 100%) % Composition in	
Type Bedrock Boulder Cobble	Dial	meter 66 mm (10") mmm (2.5"-10") mm (0.1"-2.5")	% Composition in Sampling Reach 10 40 20	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in	
Type Bedrock Boulder Cobble Gravel	> 25 64-256 2-64 r	meter 66 mm (10") 7 mm (2.5"-10")	% Composition in Sampling Reach	Substrate Type Detritus	Characteristic sticks, wood, coarse plant materials (CPOM) black, very fine organic	p to 100%) % Composition in	
Type Bedrock Boulder Cobble Gravel Sand	Shoul Dial	d add up to 100 meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty)	% Composition in Sampling Reach 10 40 20	Substrate Type Detritus Muck-Mud	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM)	p to 100%) % Composition in	
Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dial	d add up to 100 meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 04 mm (slick)	% Composition in Sampling Reach 10 40 20 30 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	p to 100%) % Composition in	
Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shoul Dial	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 4 mm (slick) Predominant Forest Field/Past Agricultura ROW Canopy Cove Open	% Composition in Sampling Reach 10 40 20 30 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 > 30ftModera	p to 100%) % Composition in Sampling Area	
Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dial	meter 56 mm (10") mm (2.5"-10") nm (0.1"-2.5") -2mm (gritty) 4-0.06 mm 4 mm (slick) Predominant Forest Field/Past Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 10 40 20 30 Surrounding Landu — Commercia — Industrial — Residential — Other:	Substrate Type Detritus Muck-Mud Marl Ise	characteristic Sticks, wood, coarse plant materials (CPOM) black, very fine organic (FPOM) grey, shell fragments Floodplain Width Wide > 30ftModera	p to 100%) % Composition in Sampling Area	



Photograph Direction NE

OTDEAN ID			OTDE AM NU	STREAM NAME UNT to Second Big Run			
STREAM ID S		- 00 56765		DATE 12/10/2015			
LAT 38.89702		<u> G -80.567652</u>					
CLIENT MVP		11 K Dulyon	PROJECT N	ANIE WIVE			
INVESTIGATO		IIIK, K. Puivei					
TNW	RPW 🔲	NRPW	FLOW REG Perennial	IME Intermitte	ent Ephemeral 🔽		
		N	•		Of the Property of the Propert		
			leasurements k Width: <u>8.0 ft</u>		Stream Erosion ✓ None Moderate .	Heavv	
		Top of Bank				·	
		LB 3.0 f	-	ft	Artificial, Modified or Char	nelized	
			th: <u>0.00 in</u>	<u> </u>	Yes No		
CHANNEL FE	ATURES	•			Dam PresentYes	<u>∠</u> No	
		Water Widtl		-1. 70 0 in	Sinuosity Low	Medium High	
		•	gh Water Mark (Widtl	,			
		•	gh Water Mark (Heig	ht): <u>8.0 111</u>	Gradient Flat Moderate	✓ Severe	
		Flow Direct	ion: Southwest			(10 ft/100 ft)	
		Water Pres	ent		Proportion of Reach Repre	sented by Stream	
			r, stream bed dry		Morphology Types	%	
		— Stream b	oed moist n water		Riffle % Run Pool %	70	
FLOW CHARACTERI	ICTICS	— Flowing	•				
CHARACTERI	31163	_			Turbidity Slightly:	Turbid	
		VelocityFast Moderate			Clear Slightly = Stained	turbidTurbid	
		Slow			Other		
INOR		STRATE COI		_	RGANIC SUBSTRATE COM		
Substrate	,		% Composition in	Substrate		% Composition in	
Туре	Diame	ter	Sampling Reach	Туре	Characteristic	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse	40	
Boulder		mm (10")	25		plant materials (CPOM)	40	
Cobble		m (2.5"-10")	15	Muck-Mud	black, very fine organic		
Gravel		(0.1"-2.5")	25		(FPOM)		
Sand Silt		nm (gritty) 0.06 mm	15	Marl	grov shall fragments		
Clay		mm (slick)	20	IVIAII	grey, shell fragments		
Ciay	₹ 0.00¬ .		ant Surrounding Lan	nduse	Indicate the dominant type		
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub		
		Field/Pa			GrassesHerba	ceous	
WATERSHED		Agriculti Other:	ural Resident	tial	Floodplain Width		
FEATURES		Ouiei.			Wide > 30ftMode	rate 15-30ft	
		Canopy Co			Narrow <16ft		
		Open <u>✓</u> Shaded	Partly shall	aded	Wetland PresentYes _V_No Wetland ID		
					dominant species present		
AQUATIC VEC	3ETATION		•	Rooted submo	—	ingFree floating	
		Floating	j algae	Attached alga	e		
		Т					
MACROINVER	TERD ATES						
OR OTHER	(IEDRAIES						
WILDLIFE OBSERVED/O							
OBSERVATIO NOTES	NS AND						



Photograph Direction East

				:		-
STREAM ID S					Second Big Run	
LAT 38.89537	4 LON	G -80.56656	5 DATE 12/10)/2015		
CLIENT MVP			PROJECT N	AME MVP		
INVESTIGATO	ORS J. McGu	ıirk, K. Pulveı				
WATER TYPE	E RPW ┌┐		FLOW REG			
TNW	NRPW [Perennial	Intermitte	ent Ephemeral 🔽		
			<u>I</u>			
					Stream Erosion	
		Top of Bank Width: 3.0 ft			None Moderate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Cha	nnelized
		LB <u>1.5</u>	ft RB <u>1.5</u>	<u>'t</u>	Yes No	
CHANNEL FE	ATURES	Water Dep	th: <u>0.00 in</u>		Dani Brazant Van	. NI-
0.11.44422.12	, o	Water Widt	h: <u>0.0 ft</u>		Dam PresentYes	<u>√</u> No
		Ordinary H	igh Water Mark (Widt	h): <u>12.0 in</u>	Sinuosity 🗸 Low	Medium High
		Ordinary H	igh Water Mark (Heig	ht): 2.0 in	Gradient	
		,	ion: West	,	Flat ✓ Moderate	Severe
		1 1011 211001			(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)
		Water Pres			Proportion of Reach Repr	esented by Stream
			r, stream bed dry oed moist		Morphology Types Riffle % Run	%
		— Standin			Pool %	70
FLOW	FLOW CHARACTERISTICS		water			
OTTAIN TEN	01100	<u></u>			Turbidity ClearSlightly	turbid Turbid
		Velocity Fast	Moderate		Opaque Stained	
		Slow	Woderate		Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CO	MPONENTS
		add up to 10			does not necessarily add ι	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	0-
Boulder	> 256	mm (10")	70	Dottituo	plant materials (CPOM)	25
Cobble		m (2.5"-10")	10	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	10		(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0	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/P			_	aceous
		Agricult				
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft — Mode	erate 15-30ft
		Canopy Co	wor		✓ Narrow <16ft	nato 10 001t
		Open	✓ Partly sh	aded		
		Shaded			Wetland PresentYes Wetland ID	<u>✓</u> No
					dominant species present	
AQUATIC VE	SETATION		-	Rooted submo		tingFree floating
		Floating	g algae	Attached alga	e	
		 				
MACDOINIVE	TEDD 4TEC					
MACROINVER OR OTHER	RIEBRAIES					
WILDLIFE OBSERVED/C	THER					
OBSERVATIO NOTES						
NOTES						



Photograph Direction North

STREAM ID	STREAM ID S-UV11			STREAM NAME Oil Creek			
CLIENT MVI			PROJECT N				
LAT 38.89314		ONG -80.555856			COUNTY Lewis		
INVESTIGATO	DRS C. St	toliker J. Niergartl	h L. McCarrell				
WATER TYPE		NRPW	FLOW REG Perennial	IME Interm	ittent Ephemeral		
CHANNEL FEATURES Estimate Measurements Top of Bank Width: 30.0 Top of Bank Height:				<u>15.0</u> _ft	Within Deedelds Ditals		
CHARACTERI	FLOW CHARACTERISTICS Standing water Flowing water Velocity Fast Slow Slow						
INOR	-	UBSTRATE COM Id add up to 100	-				
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te Characteristic	% Composition in Sampling Area	
Bedrock	<u></u>			Detritus	sticks, wood, coarse		
Boulder		56 mm (10")	20		plant materials (CPOM)	5	
Cobble		6 mm (2.5"-10")	50	Muck-Mu	black, very fine organic		
Gravel		mm (0.1"-2.5")	25		(FPOM)		
Sand		-2mm (gritty)	5	_			
Silt		04-0.06 mm		Marl	grey, shell fragments		
Clay < 0.004 mm (slick) Predominant Surro Forest Field/Pasture Agricultural ROW Canopy Cover Open Shaded		Residential Other:	al	Floodplain Width Wide > 30ft Modera Narrow <15ft	l nte 15-30ft		
MAC	ROINVER	TEBRATES/OTI	HER WILDLIFE OBS	ERVED OF	OTHER NOTES AND OBSER	RVATIONS	
	-tonti zit						



Photograph Direction SW

STREAM ID S				ME UNT to 0	Oil Creek		
			3 DATE 12/10	DATE 12/10/2015			
CLIENT MVP			PROJECT N	AME MVP			
INVESTIGATO	ORS J. McGu	ıirk, K. Pulveı	r				
WATER TYPE			FLOW REG	IME			
TNW	RPW	NRPW [Perennial _	Intermitte	ent Ephemeral 🔽		
		Estimate N	Measurements		Stream Erosion		
		Top of Ban	k Width: 3.0 ft		✓ None Moderate	Heavy	
		Top of Ban	k Height:		Artificial, Modified or Char	nnelized	
		LB <u>2.0</u>	ft RB <u>2.0</u>	<u>ft</u>	Yes ✓ No		
CHANNEL FE	ATLIDES	Water Dep	th: <u>0.00 in</u>		_ _		
CHANNEL FE	ATURES	Water Widt	th: 0.0 ft		Dam PresentYes	<u>∕</u> No	
			igh Water Mark (Widt	h)· 12.0 in	Sinuosity <u>v</u> Low	Medium High	
		,	igh Water Mark (Heig	,			
		,	tion: South	m). <u>0.0 m</u>	Gradient Flat ✓ Moderate	Severe	
		riow Direct	tion. <u>South</u>		(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types	0/	
		— Stream I Standin	bed moist		Riffle % Run Pool %	%	
FLOW	07100	- Flowing	0		70		
CHARACTERI	SIICS				Turbidity		
		Velocity				Slightly turbidTurbid eStained	
		Fast Moderate Slow			Other		
				ADONENTO			
INOR		add up to 10			RGANIC SUBSTRATE COM does not necessarily add u		
Substrate	Diame	tor.	% Composition in	Substrate	Characteristic	% Composition in	
Туре	Diame		Sampling Reach	Type	Characteristic	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse	20	
Boulder		mm (10")	10		plant materials (CPOM)	20	
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic		
Gravel		(0.1"-2.5")	20		(FPOM)		
Sand		nm (gritty)	25				
Silt		0.06 mm	25	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)		.1	In direct of the advantage of the sec		
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub		
		Field/Pasture Industrial			_	iceous	
		Agricult		tial			
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft — Mode	rate 15-30ft	
		Canopy Cover			Narrow <16ft	rato to con	
		Open	✓ Partly sh	aded			
		Shaded			Wetland PresentYes Wetland ID	<u>✓</u> No	
		Indicate th	ne dominant type and	d record the c			
Indicate the dominant type and rec AQUATIC VEGETATION Rooted emergent Rooted			Rooted subme		tingFree floating		
		Floatin	g algae	Attached alga	е		
MACROINVER	RTEBRATES	; [
OR OTHER WILDLIFE							
OBSERVED/C							
NOTES	IN AIN						



Photograph Direction North

I SIKEAWIDS			OTDE ANA NIA	ARE LINIT to C	Oil Crook		
_				STREAM NAME UNT to Oil Creek			
LAT 38.89017		G -80.553817		DATE 12/10/2015			
CLIENT MVP			PROJECT N	AME MVP			
INVESTIGATO	DRS J. McGu	ıirk, K. Pulver					
WATER TYPE	RPW 🔲	NRPW [FLOW REG Perennial	IME Intermitte	ent Ephemeral 🗸		
			leasurements k Width: 3.0 ft		Stream Erosion ✓ None Moderate	Назуу	
					V None	1 1000 y	
		Top of Banl		٠.	Artificial, Modified or Char	nnelized	
			t RB <u>2.0 f</u>	<u>t</u>	Yes No		
CHANNEL FE	ATURES	Water Dept	h: <u>0.00 in</u>		Dam PresentYes	✓ No	
		Water Widt	h: <u>0.0 ft</u>			_	
		Ordinary Hi	gh Water Mark (Widtl	h): <u>12.0 in</u>	Sinuosity <u>v</u> Low	Medium High	
		Ordinary Hi	gh Water Mark (Heigl	ht): <u>3.0 in</u>	Gradient		
		Flow Direct	ion: South			Severe	
						(10 ft/100 ft)	
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream	
		<u> </u>	n, stream bed dry bed moist		Riffle % Run	%	
,		— Standing			Pool %		
FLOW CHARACTERI	STICS	Flowing	water		Toukidia.		
		Valacity			Turbidity ClearSlightly	turbid Turbid	
		Velocity Fast	Moderate		Opaque Stained		
Slow					Other		
INOR	GANIC SUB	STRATE COI	MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS	
<u> </u>	(should a	add up to 100	,		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	22	
Boulder		mm (10")	10		plant materials (CPOM)	20	
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic		
Gravel		(0.1"-2.5")	20		(FPOM)		
Sand		nm (gritty)	25				
Silt	0.004-0	1 00			l .	I .	
Clay			25	Marl	grey, shell fragments		
	< 0.004 r	mm (slick)					
	< 0.004 r	mm (slick) Predomina	nt Surrounding Lan	nduse	Indicate the dominant type		
	< 0.004 I	mm (slick) Predomina V Forest	int Surrounding Lan	nduse rcial	Indicate the dominant type ✓ Trees Shrub	S	
	< 0.004 ı	mm (slick) Predomina	int Surrounding Lan Commer astureIndustrial	nduse rcial I	Indicate the dominant type ✓ Trees Shrub Grasses Herba	S	
WATERSHED		mm (slick) Predomina ✓ Forest — Field/Pa	int Surrounding Lan Commer astureIndustrial	nduse rcial I	Indicate the dominant type ✓ Trees Shrub _ Grasses Herba Floodplain Width	s ceous	
		mm (slick) Predomina Forest Field/Pa Agricult Other:	ant Surrounding Lan Commer asture Industrial ural Resident	nduse rcial I	Indicate the dominant type ✓ Trees Shrub _ Grasses Herba Floodplain Width Wide > 30ft Model	s ceous	
WATERSHED		mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co	ant Surrounding Lan Commer asture Industrial ural Resident	iduse cial I tial	Indicate the dominant type ✓ Trees Shrub _ Grasses Herba Floodplain Width	s ceous	
WATERSHED		mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded	unt Surrounding Lan Comment asture Industrial ural Resident over Partly sha	iduse cial I tial	Indicate the dominant type In	s ceous rate 15-30ft	
WATERSHED FEATURES		mm (slick) Predomina ✓ Forest — Field/Pa — Agricult — Other: Canopy Co — Open — Shaded Indicate th	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shall e dominant type and	nduse rcial I tial aded	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED		mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Rooted	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft	
WATERSHED FEATURES		mm (slick) Predomina ✓ Forest — Field/Pa — Agricult — Other: Canopy Co — Open — Shaded Indicate th	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	nduse rcial I tial aded	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES		mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Rooted	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES		mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Rooted	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES	GETATION	mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Floating	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES AQUATIC VEC	GETATION	mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Floating	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES AQUATIC VEC	GETATION	mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Floating	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
MACROINVEF OR OTHER WILDLIFE OBSERVED/O OBSERVATIO	GETATION RTEBRATES	mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Floating	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	
WATERSHED FEATURES AQUATIC VEC	GETATION RTEBRATES	mm (slick) Predomina Forest Field/Pa Agricult Other: Canopy Co Open Shaded Indicate th Floating	unt Surrounding Lan Comment asture Industrial ural Resident over Partly shale e dominant type and emergent	iduse cial I tial aded d record the c	Indicate the dominant type In	s ceous rate 15-30ft <u>~</u> No	



Photograph Direction North

STREAM ID S-L61	STREAM NAME Crooked Run
LAT 38.880121 LONG -80.563499	DATE 05/16/2015
PROJEC MVP	CLIENT MVP
INVESTIGATORS Sean Kite, Ashley Hatfield	
FLOW REGIME Perennial Intermittent ✓ Ephemeral	WATER TYPE TNW RPW_✓ NRPW

Perennial	Intermitter	nt ✓ Ephemeral TNW RP\		RPW <u>✓</u>	NRPW	
		Estimate N	l easurements		Stream Erosion	
		Top of Ban	k Width: 10.0 ft		None Moderate	Heavy
		Top of Ban	k Height:		Artificial, Modified or Char	nalizad
		LB 3.0	ft RB 3.0	ft	Yes _✓ No	IIICIIZCO
OLIANINEI EE	A TUDEO	Water Dept	th: 3.00 in		_	
CHANNEL FE	ATURES	Water Widt			Dam PresentYes _	<u>∠</u> No
			Mark: <u>1.0 ft</u>		Sinuosity Low _	Medium High
		-			<u> </u>	
		Flow Direct	tion: <u>vv</u>		Gradient	0
					Flat	Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	
			ped moist		Riffle 70 % Run 10	%
FLOW		Standing	•		Pool 20 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			✓ Clear — Slightly	
			✓ Moderate		OpaqueStained	
		Slow			Other	
INOR		STRATE CO		_	RGANIC SUBSTRATE CON	
	(should a	add up to 100	•		does not necessarily add u	
Substrate Type	Diame	ter	% Composition ir Sampling Reach		Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")		Detritus	plant materials (CPOM)	10
Cobble	64-256 m	m (2.5"-10")	70	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	20	Widok Wida	(FPOM)	
Sand	0.06-2m	nm (gritty)	5			
Silt	0.004-0).06 mm	5	Marl	grey, shell fragments	
Clay	< 0.004 r	nm (slick)				
			ant Surrounding La		Indicate the dominant type	
		Forest	Commercial		✓ Trees Shrub Grasses — Herba	
			ld/PastureIndustrial ricultural Residential		GrassesHerba	ceous
WATERSHED		Other:			Floodplain Width	
FEATURES		_			Wide > 30ftMode Narrow <16ft	rate 15-30ft
		Canopy Co		hadad	INATIOW \ TOIL	
		Partly openPartly shadedOpen			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type ar	nd record the c	dominant species present	
AQUATIC VE	GETATION		emergent	_Rooted subme	<u> </u>	tingFree floating
		Floating	g algae	_Attached alga	е	
		Salamande	rs observed.			
			0.4			
MACROINVER OR OTHER	RTEBRATES	original S-L	.01			
WILDLIFE OBSERVED/C	TUED					
OBSERVATIO						
NOTES						



Photograph Direction NE

			1				
STREAM ID S	_			STREAM NAME UNT to Clover Fork			
LAT 38.863209 LONG -80.525775		5 DATE 11/20	DATE 11/20/2015				
CLIENT MVP			PROJECT N	AME MVP			
INVESTIGATO	ORS JM KP						
TNW	RPW 🔽	NRPW [FLOW REG Perennial	IME Intermitt	ent Ephemeral		
		Father et a B			Otrono Francisco		
			/leasurements k Width: <u>10.0 ft</u>		Stream Erosion ✓ None Moderate	Heavv	
		Top of Ban					
		LB 1.5		'	Artificial, Modified or Char	nnelized	
				<u> </u>	Yes No		
CHANNEL FE	ATURES		th: <u>2.00 in</u>		Dam PresentYes	<u>∠</u> No	
		Water Widt		h). 10 ft	Sinuosity 🗸 Low	Medium High	
		•	igh Water Mark (Widt	,			
		•	igh Water Mark (Heig	nt): <u>6.0 III</u>	Gradient ✓ Flat Moderate	Severe	
		Flow Direct	ion: South			(10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	sented by Stream	
			r, stream bed dry		Morphology Types Riffle 30 % Run 10) %	
			oed moist		Riffle 30 % Run 10) 70	
FLOW CHARACTERI	STICS		Standing water Flowing water		00		
OHARAGIER	01100				Turbidity Clear Slightly	turbidTurbid	
		Velocity Fast Moderate			Clear Slightly turbid Turbid Opaque Stained		
		✓ Slow	ow		Other		
INOR					RGANIC SUBSTRATE CON does not necessarily add u		
Substrate	Diame	ter	% Composition in	Substrate	Characteristic	% Composition in	
Туре			Sampling Reach	Type	0.10.00.01.01.0	Sampling Area	
Bedrock Boulder	- 256	mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)	5	
Cobble		mm (10") m (2.5"-10")	50		, ,		
Gravel		(0.1"-2.5")	50 30	Muck-Mud	black, very fine organic (FPOM)		
Sand		nm (gritty)	10		, ,		
Silt		0.06 mm	10	Marl	grey, shell fragments		
Clay	< 0.004 ı	mm (slick)	10		g.ey, enem nageme		
		Predomina	ant Surrounding Lan	duse	Indicate the dominant type		
		<u>✓</u> Forest Commercial			<u>✓</u> TreesShrub		
		Field/Pa			GrassesHerba	ceous	
WATERSHED		Other:		iidi	Floodplain Width		
FEATURES					Wide > 30ft	rate 15-30ft	
		Canopy Co <u>✓</u> Open	over Partly sh	aded	Nanow Cron		
		Shaded		Wetland PresentYes Wetland ID	<u>✓</u> No		
4011471037	NETATION				dominant species present	ing Frankland	
AQUATIC VEC			Rooted emergent Rooted submergent Rooted floating Free floating				
		Flows to S-	.\/\/2				
		1 10003 10 3	- V V Z				
MACROINVER	RTEBRATES						
OR OTHER WILDLIFE							
OBSERVED/C							
NOTES							



Photograph Direction North

STREAM ID S-L51	STREAM NAME Barbecue Run
LAT 38.840022 LONG -80.51884	DATE 05/14/2015
PROJEC MVP	CLIENT MVP
INVESTIGATORS Sean Kite, Ashley Hatfield	
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

Perenniai -	_	nt <u> </u>	erai INVV	RPW —	NRPW —	
					<u> </u>	
	Estimate Measurements Top of Bank Width: 20.0 ft			Stream ErosionNone ✓ Moderate	Heavy	
					NoneNoderate	Ticavy
		Top of Ban	· ·	_	Artificial, Modified or Char	nnelized
		LB <u>3.0</u>	ft RB <u>3.0</u>	<u>ft</u>	<u>✓</u> YesNo	
CHANNEL FE	ATURES	Water Dep	th: <u>4.00 in</u>		Dom Brocent Voc	4 No
		Water Widt	th: 3.0 ft		Dam PresentYes _	Z NO
		High Water	Mark: 24.0 in		Sinuosity Low	Medium High
		Flow Direct	tion: Southwest		Cradiant	
		2			Gradient Flat <u>✓</u> Moderate	Severe
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types Riffle 40 % Run 30	%
		Stream	bed moist		Pool 30 %	/0
FLOW CHARACTER	ICTICC	<u>✓</u> Flowing	-		70 70	
CHARACTER	is i i cs				Turbidity	
		Velocity			✓ ClearSlightly	
		Fast Slow	<u>✓</u> Moderate		OpaqueStainedOther	
				_		
INOR		add up to 10	MPONENTS 0%)		RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritue	sticks, wood, coarse	
Boulder	> 256	mm (10")	5	Detritus	plant materials (CPOM)	5
Cobble	64-256 m	m (2.5"-10")	60	Music Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	20	Muck-Mud	(FPOM)	
Sand	0.06-2n	nm (gritty)	n (gritty) 10			
Silt	0.004-0	0.06 mm	06 mm 5		grey, shell fragments	
Clay	< 0.004 ı	mm (slick)				
			ant Surrounding Lan	duse	Indicate the dominant type	(Check one)
		<u>✓</u> Forest	Commer	cial	<u>✓</u> TreesShrub	
		— Field/Pa			Grasses Herba	iceous
WATERSHED		Other:	ural <u>v</u> Residential		Floodplain Width	
FEATURES		0.1101			✓ Wide > 30ft Mode	rate 15-30ft
		Canopy Co			Narrow <16ft	
			ppen _v_Partly sh	aded	Wetland PresentYes	✓ No
		Shaded	OpenOpen		Wetland ID	_
					lominant species present	
AQUATIC VE	GETATION		_	Rooted subme	_	tingFree floating
		Floating	g algae	Attached algae	e 	
		1				
		Salamande	ers observed.			

MACROINVERTEBRATES OR OTHER						
WILDLIFE OBSERVED/C	THER					
OBSERVATIO						
NOTES						



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

STREAM ID S-J37	STREAM NAME UNT to Barbecue Run
LAT 38.839151 LONG -80.51976	DATE 05/15/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. Santillo, S. Kelly, R. Meel	ker
FLOW REGIME Perennial Intermittent ✓ Ephemeral	WATER TYPE TNW RPW ✓ NRPW

Perennial	Intermitte	nt <u> —</u> Ephem	eral TNW	RPW <u>→</u>	NRPW	
	1					
			Measurements		Stream Erosion	Haava
			k Width: 3.0 ft		NoneModerate	<u> —</u> пеаvy
		Top of Ban	•		Artificial, Modified or Char	nnelized
		LB <u>1.0</u>	ft RB <u>1.0</u>	<u>ft</u>	Yes No	
CHANNEL FE	ATURES	Water Dep	th: 1.00 in		Dam Present Yes	∠ No
		Water Widt	h: <u>6.0 in</u>			
		High Water	Mark: <u>6.0 in</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: North		Gradient	
					FlatModerate _	
		Water Due			(0.5/100 ft (2 ft/100 ft)	,
		Water Pres No wate	r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
		✓ Stream I			Riffle 70 % Run 30	%
FLOW		Standing	•		Pool %	
CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			ClearSlightly	
		Fast	Moderate		OpaqueStained	
		<u>✓</u> Slow		ſ	Other	
INOR		STRATE CO add up to 10	MPONENTS 0%)	_	RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition ir Sampling Area
Bedrock				Dotrituo	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")	0	Detritus	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	40	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	40	Widok-Wida	(FPOM)	
Sand	0.06-2n	nm (gritty)	10			
Silt	0.004-0).06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)	10			
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type Trees Shrub	
		_	asture Industrial		Grasses Herba	
		Agricult	ural Residential		_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
		Canony C	over		✓ Narrow <16ft	
		Canopy Cover <u>✓</u> Partly open <u>✓</u> Partly sha		aded		
		Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and	d record the d	Iominant species present	
AQUATIC VE	GETATION	Rooted	l emergent	Rooted subme	ergentRooted float	tingFree floating
		Floatin	g algae	Attached algae	e	
		Seep fed st	tream at headwaters			
MACROINVERTEBRATES OR OTHER						
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES						
NOTES						



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

STREAM ID S-L57	STREAM NAME UNT to Barbecue Run			
LAT 38.828304 LONG -80.525748	DATE 05/15/2015			
PROJEC MVP	CLIENT MVP			
INVESTIGATORS Sean Kite, Ashley Hatfield				
FLOW REGIME Perennial Intermittent Ephemeral ✓	WATER TYPE TNW RPW NRPW_✓			

Perennial		ntEphem	eral <u>WATER 11</u>	RPW	NRPW <u></u> ✓	
			/leasurements k Width: 4.0 ft		Stream ErosionNone ✓ Moderate	Ноэм
		·			None _v Moderate	rieavy
		Top of Ban	· ·		Artificial, Modified or Char	nnelized
		LB <u>8.0</u>		<u>in</u>	Yes _ <u>√</u> No	
CHANNEL FE	ATURES	Water Dept	th: <u>1.00 in</u>		Dam PresentYes	/ No
		Water Widt	h: 1.0 ft			
		High Water	Mark: <u>4.0 in</u>		Sinuosity Low _✓	Medium High
		Flow Direct	tion: W		Gradient	
					Flat Moderate _	
		Motor Duce			`	(10 ft/100 ft)
		Water Pres No wate	sent r, stream bed dry		Proportion of Reach Repre Morphology Types	esented by Stream
		Stream l			Riffle 80 % Run	%
EL OW		✓ Standing	g water		Pool 20 %	
FLOW CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			✓ ClearSlightly	turbidTurbid
		_	Moderate		OpaqueStained	
		Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	0	RGANIC SUBSTRATE CON	MPONENTS
	(should a	add up to 10	,		loes 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")		20111110	plant materials (CPOM)	10
Cobble		m (2.5"-10")	5	Muck-Mud	black, very fine organic	
Gravel		(0.1"-2.5")	10		(FPOM)	
Sand		nm (gritty)	5	_		
Silt		0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004 i	mm (slick)	70			
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type ✓ Trees Shrub	
		_	Pasture Industrial			iceous
		AgriculturalResidential		tial	_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
		Canony Co	Company Cover		✓ Narrow <16ft	
		Canopy Cover ✓ Partly open Partly shaded				
		ShadedOpen			Wetland PresentYes Wetland ID	<u>√</u> No
		Indicate th	e dominant type and	d record the d	Iominant species present	
AQUATIC VE	GETATION			Rooted subme		tingFree floating
		Floating	g algae	Attached algae	e	
		Information	listed on this form re	presents the d	ata collected in 2015. The st	ream was revisited
		on 09/27/20	019. The presence of	a stream chan	inel and OHWM was confirm	ed.
MACROINVER OR OTHER	MACROINVERTEBRATES					
WILDLIFE	TUE-					
OBSERVED/C						
NOTES	-					

Stream ID S-L57



Photograph Direction East

Date: 05/15/2015

Comments: 2015 stream identification.



Photograph Direction East

Date: 09/25/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-L60	STREAM NAME Left Fork Knawl Creek
LAT 38.82405 LONG -80.525039	DATE 05/15/2015
PROJEC MVP	CLIENT MVP
INVESTIGATORS Sean Kite, Ashley Hatfield	
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW

Perenniai -	_	nt <u> </u>	erai INVV	RPW —	NRPW—			
	1	F-414- 1			04			
		Estimate Measurements Top of Bank Width: 30.0 ft			Stream Erosion None Moderate Heavy			
		•			NoneNoderateneavy			
		Top of Ban	· ·		Artificial, Modified or Channelized			
		LB <u>5.0</u>	ft RB <u>6.0</u>	<u>tt</u>	Yes No			
CHANNEL FEATURES		Water Dep	th: <u>6.00 in</u>		Dam PresentYes _v_No			
		Water Widt	h: <u>7.0 ft</u>					
		High Water	Mark: <u>12.0 in</u>		Sinuosity Low Medium High			
		Flow Direction: W			Gradient			
						Severe		
					(0.5/100 ft (2 ft/100 ft) (10 ft/100 ft)			
		Water Present			Proportion of Reach Repre	esented by Stream		
			r, stream bed dry bed moist		Morphology Types Riffle 30 % Run 40 %			
		Standing			Pool 30 %			
FLOW CHARACTER	STICS	Flowing water						
01340101214					Turbidity <u>✓</u> ClearSlightly turbid1			
		Velocity Fast	✓ Moderate		OpaqueStained			
		Slow	Woderate		— Other			
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS								
		add up to 100%)			(does not necessarily add up to 100%)			
Substrate	Diame	ter	% Composition in	Substrate	Characteristic	% Composition in		
Type			Sampling Reach	Туре		Sampling Area		
Bedrock Boulder	> 256 ı	mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)	15		
Cobble	64-256 mm (2.5"-10")		70		black, very fine organic			
Gravel	2-64 mm (0.1"-2.5")			Muck-Mud	(FPOM)	20		
Sand	0.06-2n	nm (gritty)	30					
Silt	0.004-0.06 mm		Marl		grey, shell fragments			
Clay	< 0.004 r	mm (slick)						
		Predomina	ant Surrounding Lan	duse	Indicate the dominant type	(Check one)		
		<u>✓</u> Forest	Commer		<u>✓</u> Trees Shrub			
		Field/PastureIndustrial Agricultural Resident			Grasses Herba	iceous		
WATERSHED		Other:	tural Resident	ılaı	Floodplain Width			
FEATURES		Other:			✓ Wide > 30ft Moderate 15-30ft			
		Canopy Co			Narrow <16ft			
		Partly open Partly shaded			Wetland PresentYes	∨ No		
		ShadedOpen			Wetland ID	_		
			Indicate the dominant type and record the dominant species present					
AQUATIC VE	SETATION	Rooted emergentRooted submergentRooted floatingFree floating						
Floating algaeAttached algae								
		<u> </u>						
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES		Salamande	ers, fish, and crawfish	observed.				
		1						



Photograph Direction ENE

STREAM ID S-LL1	STREAM NAME Knawl Creek						
LAT 38.823712 LONG -80.525344	DATE 08/12/2015						
CLIENT MVP	PROJECT NAME MVP						
INVESTIGATORS R Sparhawk, C Helfrich, E Foster							
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —						

i cicilliai =		nt <u> </u>	erai Tivvv	RPW —	NRPW			
		Cotimate *	loon was to		Stream Eresian			
			Measurements k Width: 30.0 ft		Stream ErosionNone <u>✓</u> Moderate	Heavy		
		Top of Ban	k Height:		Artificial, Modified or Channelized			
		LB <u>4.0 ft</u> RB <u>4.0 ft</u>			Yes ✓ No			
CHANNEL FE	ATURES	Water Dep	th: 10.00 in		— —			
CHANNEL FEATURES		Water Widt	th: 6.0 ft		Dam PresentYes <u>✓</u> No			
		High Water	Mark: <u>20.0</u> ft		Sinuosity Low	Medium High		
		Flow Direct	tion: NW		Gradient			
					Flat Moderate Severe			
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)		
		Water Present No water, stream bed dry			Proportion of Reach Represented by Stream Morphology Types			
			bed moist		Riffle 15 % Run 35 % Pool 50 %			
EL OW		Standing	g water					
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	water		T			
		Velocity			Turbidity ✓ ClearSlightly turbidTurbi			
		Fast	Moderate		OpaqueStained			
		✓ Slow			Other			
INOR		STRATE CO		ORGANIC SUBSTRATE COMPONENTS				
	(should a	add up to 100%)		-	does not necessarily add u			
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area		
Bedrock	k			Detritus	sticks, wood, coarse plant materials (CPOM)			
Boulder	> 256 mm (10")		15	Denilus		15		
Cobble 64-256 mr		m (2.5"-10")	n (2.5"-10") 70		black, very fine organic			
Gravel	2-64 mm (0.1"-2.5")		15	Muck-Mud	(FPOM)			
Sand	0.06-2mm (gritty)							
Silt	0.004-0.06 mm		Marl		grey, shell fragments			
Clay	< 0.004 1	mm (slick)		4		(0)		
		Predominant Surrounding Landuse ✓ Forest Commercial			Indicate the dominant type (Check one) Trees Shrubs			
		Field/P	_		Grasses Herbaceous			
WATERCHER		Agricult	tural Resident	tial	Floodplain Width Wide > 30ft Moderate 15-30ft			
WATERSHED FEATURES		Other:						
		Canopy Cover			Narrow <16ft			
		Partly open Partly shaded			Wetland PresentYes ✓ No			
		Shaded	Open		Wetland ID			
		Indicate the dominant type and record the dominant species present						
AQUATIC VEGETATION		Rooted emergentRooted submergentRooted floatingFree floating						
		Floating	g algae	Attached algae	e 			
		1						
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 09/252019. The presence of a stream channel and OHWM was confirmed.						