

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

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 4 ft Top of Bank Height: LB 8.0 in RB 8.0 in Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 8.0 in Flow Direction: North	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input checked="" type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle % Run % Pool %  <b>Turbidity</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	100
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")	5	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	5	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	40			
Clay	< 0.004 mm (slick)	40			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Disturbed from fill of what looks to be an old road. Abundant garbage in banks.  Information listed on this form represents the data collected in 2015. The stream was revisited on 11/08/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-C20



Photograph Direction North

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction East

Date: 11/08/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-C19	<b>STREAM NAME</b> Maggodee Creek
<b>LAT</b> 37.055101 <b>LONG</b> -79.830081	<b>DATE</b> 04/07/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> L.Harloe, K.Lamontagne, L. Summers	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 45 ft Top of Bank Height: LB 3.0 ft RB 3.0 ft Water Depth: 2.00 ft Water Width: 40.0 ft High Water Mark: 3.0 ft Flow Direction: South	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Dam Present</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water  <b>Velocity</b> <input checked="" type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 75 % Run 25 % Pool %  <b>Turbidity</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		5	Detritus	sticks, wood, coarse plant materials (CPOM)	5
Boulder	> 256 mm (10")	25			
Cobble	64-256 mm (2.5"-10")	30			
Gravel	2-64 mm (0.1"-2.5")	10	Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2mm (gritty)	5	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	15			
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	This reach is below a dam. Each side was mapped with access overland. Unable to cross creek, too deep.
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/08/2019. The presence of a stream channel and OHWM was confirmed

## Stream Photograph Page

Stream ID S-C19



Photograph Direction North

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/08/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-KL36		<b>STREAM NAME</b> UNT to Blackwater River	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.053197	<b>LONG</b> -79.884102	<b>DATE</b> 08/29/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> J. Cook, S. Pilcher, A. Flake			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>10.0</u> ft Top of Bank Height: _____ LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>7.0</u> ft Ordinary High Water Mark (Width): <u>7.5</u> ft Ordinary High Water Mark (Height): <u>4.0</u> in Flow Direction: <u>Southeast</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	<b>FLOW CHARACTERISTICS</b> <b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> (Only enter if water present) Riffle 40 % Run 55 % Pool 5 % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
<table border="1"> <thead> <tr> <th colspan="3">INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) <small>100</small></th> <th colspan="3">ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)</th> </tr> <tr> <th>Substrate Type</th> <th>Diameter</th> <th>% Composition in Sampling Reach</th> <th>Substrate Type</th> <th>Characteristic</th> <th>% Composition in Sampling Area</th> </tr> </thead> <tbody> <tr> <td>Bedrock</td> <td></td> <td></td> <td rowspan="2">Detritus</td> <td rowspan="2">sticks, wood, coarse plant materials (CPOM)</td> <td rowspan="2"></td> </tr> <tr> <td>Boulder</td> <td>&gt; 256 mm (10")</td> <td>10</td> </tr> <tr> <td>Cobble</td> <td>64-256 mm (2.5"-10")</td> <td>30</td> <td rowspan="2">Muck-Mud</td> <td rowspan="2">black, very fine organic (FPOM)</td> <td rowspan="2"></td> </tr> <tr> <td>Gravel</td> <td>2-64 mm (0.1"-2.5")</td> <td></td> </tr> <tr> <td>Sand</td> <td>0.06-2mm (gritty)</td> <td>40</td> <td rowspan="3">Marl</td> <td rowspan="3">grey, shell fragments</td> <td rowspan="3"></td> </tr> <tr> <td>Silt</td> <td>0.004-0.06 mm</td> <td>20</td> </tr> <tr> <td>Clay</td> <td>&lt; 0.004 mm (slick)</td> <td></td> </tr> </tbody> </table>			INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) <small>100</small>			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)		Boulder	> 256 mm (10")	10	Cobble	64-256 mm (2.5"-10")	30	Muck-Mud	black, very fine organic (FPOM)		Gravel	2-64 mm (0.1"-2.5")		Sand	0.06-2mm (gritty)	40	Marl	grey, shell fragments		Silt	0.004-0.06 mm	20	Clay	< 0.004 mm (slick)	
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<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> ROW <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded		<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input checked="" type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <15ft																																									

<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  NHD confirmed stream. Braided with an undulated bank width. Macro present.
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## Stream Photograph Page

Stream ID S-KL36

Date: 08/29/2016



Photograph Direction NW

Comments:

<b>STREAM ID</b> S-F11	<b>STREAM NAME</b> Blackwater River
<b>LAT</b> 37.052798 <b>LONG</b> -79.825762	<b>DATE</b> 04/04/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A. Flake, E. Strohmaier, D. McCullough	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input checked="" type="checkbox"/> RPW <input type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>100</u> ft Top of Bank Height: LB <u>20.0</u> ft RB <u>20.0</u> ft Water Depth: <u>7.00</u> in Water Width: <u>89.0</u> ft High Water Mark: <u>      </u> ft Flow Direction: <u>North</u>		<b>Stream Erosion</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)		
	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow		<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 25 % Run 75 % Pool % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____		
<b>INORGANIC SUBSTRATE COMPONENTS</b> (should add up to 100%)			<b>ORGANIC SUBSTRATE COMPONENTS</b> (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				
<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open		<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b> _____		
	<b>AQUATIC VEGETATION</b> <b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae				

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

## Stream Photograph Page

Stream ID S-F11



Photograph Direction North

Date: 04/04/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/08/2019

Comments: 2019 stream identification confirmation.



## Stream Photograph Page

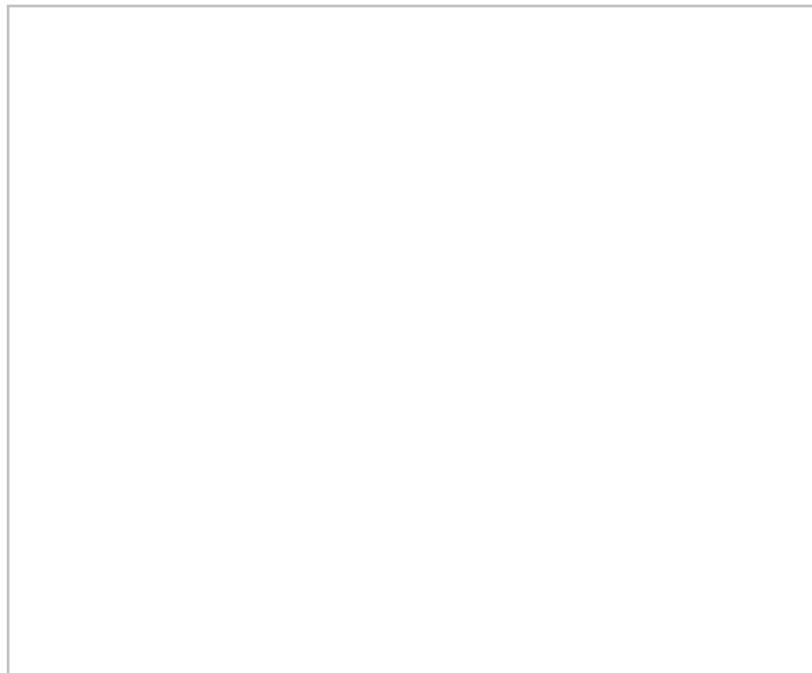
Stream ID S-F11



Photograph Direction ESE

Date: 12/03/2020

Comments: 2020 stream identification.



Photograph Direction \_\_\_\_\_

Date: \_\_\_\_\_

Comments: \_\_\_\_\_

<b>STREAM ID</b> S-KL35		<b>STREAM NAME</b> UNT to Blackwater River	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.05208	<b>LONG</b> -79.885564	<b>DATE</b> 08/29/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> J. Cook, S. Pilcher, A. Flake			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>4.0</u> ft Top of Bank Height: _____ LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>2.00</u> in Water Width: <u>2.0</u> ft Ordinary High Water Mark (Width): <u>2.5</u> ft Ordinary High Water Mark (Height): <u>3.0</u> in Flow Direction: <u>Southeast</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Culvert Material: <u>Concrete</u> Culvert Size: <u>24</u> in																																										
	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> (Only enter if water present) Riffle 40 % Run 60 % Pool %  <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> ROW <input type="checkbox"/> Other: _____  <b>Canopy Cover</b> <input checked="" type="checkbox"/> Open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded		<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <15ft																																									

<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  NHD confirmed stream, bordered on the north side by W-EF48. Macro and fish present.
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## Stream Photograph Page

Stream ID S-KL35

Date: 08/29/2016



Photograph Direction North

Comments:

<b>STREAM ID</b> S-F9B	<b>STREAM NAME</b> UNT to Blackwater River
<b>LAT</b> 37.047178 <b>LONG</b> -79.813345	<b>DATE</b> 04/04/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A. Flake, E. Strohmaier, D. McCullough	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>15</u> ft Top of Bank Height: LB <u>4.0</u> ft RB <u>4.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>6.0</u> ft High Water Mark: <u>8.0</u> in Flow Direction: <u>Northwest</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 60 % Run % Pool 40 % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	50
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")	50	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	20			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b> _____
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Upper segment (S-F9A) was determined to be intermittent and is highly degraded from cattle use. Lower segment of stream (S-F9B) was determined to be perennial based on continuous flow. Veg and fish are present in lower segment channel. Center line was surveyed. Lower segment (S-F9B) flow direction north. Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-F9B



Photograph Direction SSE

Date: 04/04/2015

Comments: 2015 stream identification.



Photograph Direction SSE

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-II2	<b>STREAM NAME</b> Little Creek
<b>LAT</b> 37.050229 <b>LONG</b> -79.907716	<b>DATE</b> 08/09/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A. Lands, K. Larsen, L. Sexton	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>60</u> ft Top of Bank Height: LB <u>15.0</u> in RB <u>8.0</u> ft Water Depth: <u>1.00</u> ft Water Width: <u>2.0</u> ft High Water Mark: <u>6.0</u> in Flow Direction: <u>South</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 40 % Run 60 % Pool % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		50	Detritus	sticks, wood, coarse plant materials (CPOM)	40
Boulder	> 256 mm (10")	5			
Cobble	64-256 mm (2.5"-10")	10	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	15			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	5			
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Not determined. Riverine wetlands abut large stream, but within bank.
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## Stream Photograph Page

Stream ID S-II2

Date: 08/09/2015



Photograph Direction South

Comments:

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

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 9 ft Top of Bank Height: LB 3.0 ft RB 4.0 ft Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 3.0 in Flow Direction: West	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input checked="" type="checkbox"/> No water, stream bed dry <input checked="" type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle % Run % Pool %  <b>Turbidity</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	100
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")	5	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	10			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	35			
Clay	< 0.004 mm (slick)	35			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-F10



Photograph Direction SW

Date: 04/04/2015

Comments: 2015 stream identification.



Photograph Direction SW

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-CD1		<b>STREAM NAME</b> UNT to Blackwater River	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.048287	<b>LONG</b> -79.897648	<b>DATE</b> 04/05/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> HS,CW,AC			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>7.0</u> ft Top of Bank Height: _____ LB <u>1.5</u> ft RB <u>1.0</u> ft Water Depth: <u>4.00</u> in Water Width: <u>3.0</u> ft Ordinary High Water Mark (Width): <u>3.5</u> ft Ordinary High Water Mark (Height): <u>10.0</u> in Flow Direction: <u>South</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	<b>FLOW CHARACTERISTICS</b> <b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> (Only enter if water present) Riffle 80 % Run 20 % Pool % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
<table border="1"> <thead> <tr> <th colspan="3">INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100</th> <th colspan="3">ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)</th> </tr> <tr> <th>Substrate Type</th> <th>Diameter</th> <th>% Composition in Sampling Reach</th> <th>Substrate Type</th> <th>Characteristic</th> <th>% Composition in Sampling Area</th> </tr> </thead> <tbody> <tr> <td>Bedrock</td> <td></td> <td></td> <td rowspan="2">Detritus</td> <td rowspan="2">sticks, wood, coarse plant materials (CPOM)</td> <td rowspan="2"></td> </tr> <tr> <td>Boulder</td> <td>&gt; 256 mm (10")</td> <td></td> </tr> <tr> <td>Cobble</td> <td>64-256 mm (2.5"-10")</td> <td>10</td> <td rowspan="2">Muck-Mud</td> <td rowspan="2">black, very fine organic (FPOM)</td> <td rowspan="2"></td> </tr> <tr> <td>Gravel</td> <td>2-64 mm (0.1"-2.5")</td> <td>10</td> </tr> <tr> <td>Sand</td> <td>0.06-2mm (gritty)</td> <td>80</td> <td rowspan="3">Marl</td> <td rowspan="3">grey, shell fragments</td> <td rowspan="3"></td> </tr> <tr> <td>Silt</td> <td>0.004-0.06 mm</td> <td></td> </tr> <tr> <td>Clay</td> <td>&lt; 0.004 mm (slick)</td> <td></td> </tr> </tbody> </table>			INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)		Boulder	> 256 mm (10")		Cobble	64-256 mm (2.5"-10")	10	Muck-Mud	black, very fine organic (FPOM)		Gravel	2-64 mm (0.1"-2.5")	10	Sand	0.06-2mm (gritty)	80	Marl	grey, shell fragments		Silt	0.004-0.06 mm		Clay	< 0.004 mm (slick)	
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)																																									
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area																																							
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)																																								
Boulder	> 256 mm (10")																																											
Cobble	64-256 mm (2.5"-10")	10	Muck-Mud	black, very fine organic (FPOM)																																								
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Sand	0.06-2mm (gritty)	80	Marl	grey, shell fragments																																								
Silt	0.004-0.06 mm																																											
Clay	< 0.004 mm (slick)																																											
<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> ROW <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded		<b>Floodplain Width</b> <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <15ft																																									

<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b> Mayflies, 2 species caddisflies
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## Stream Photograph Page

Stream ID S-CD1

Date: 04/05/2016



Photograph Direction South

Comments:

<b>STREAM ID</b> S-F9a	<b>STREAM NAME</b> UNT to Blackwater River
<b>LAT</b> 37.047179 <b>LONG</b> -79.813345	<b>DATE</b> 04/04/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A. Flake, E. Strohmaier, D. McCullough	
<b>FLOW REGIME</b> Perennial___ Intermittent___ Ephemeral___	<b>WATER TYPE</b> TNW___ RPW___ NRPW___

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 15.0 ft Top of Bank Height: LB 4.0 ft      RB 4.0 ft Water Depth: 1.00 ft Water Width: 6.0 ft High Water Mark: _____ ft Flow Direction: NW	<b>Stream Erosion</b> ___ None    ___ Moderate <input checked="" type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> ___ Yes <input checked="" type="checkbox"/> No  <b>Dam Present</b> ___ Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> ___ Low <input checked="" type="checkbox"/> Medium    ___ High  <b>Gradient</b> ___ Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft)    ___ Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> ___ No water, stream bed dry ___ Stream bed moist <input checked="" type="checkbox"/> Standing water ___ Flowing water  <b>Velocity</b> ___ Fast    ___ Moderate <input checked="" type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 60 %    Run _____ % Pool 40 %  <b>Turbidity</b> ___ Clear <input checked="" type="checkbox"/> Slightly turbid    ___ Turbid ___ Opaque    ___ Stained ___ Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	50
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")	50	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	20			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest    ___ Commercial <input checked="" type="checkbox"/> Field/Pasture    ___ Industrial ___ Agricultural    ___ Residential ___ Other: _____  <b>Canopy Cover</b> <input checked="" type="checkbox"/> Partly open    ___ Partly shaded ___ Shaded    ___ Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees    ___ Shrubs ___ Grasses    ___ Herbaceous  <b>Floodplain Width</b> ___ Wide > 30ft    ___ Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> ___ Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> ___ Rooted emergent    ___ Rooted submergent    ___ Rooted floating    ___ Free floating ___ Floating algae    ___ Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Upper segment was determined to be intermittent and is highly degraded from cattle use. Center line was surveyed.
	Information listed on this form represents the data collected in 2015. The stream was not accessible for survey in 2019 to reconfirm the presence of a stream channel and OHWM.



## Stream Photograph Page

Stream ID S-F9a

Date: 04/04/2015



Photograph Direction ESE

Comments:

<b>STREAM ID</b> S-MM29	<b>STREAM NAME</b> UNT to Maple Branch
<b>LAT</b> 37.043839 <b>LONG</b> -79.822841	<b>DATE</b> 09/16/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A.Grech, A. Stott, L.Sexton	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>15</u> ft Top of Bank Height: LB <u>5.0</u> ft RB <u>12.0</u> ft Water Depth: <u>2.00</u> in Water Width: <u>7.0</u> ft High Water Mark: <u>1.0</u> ft Flow Direction: <u>Northwest</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 70 % Run % Pool 30 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		90	Detritus	sticks, wood, coarse plant materials (CPOM)	20
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")	5	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	5	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Other: Access road <b>Canopy Cover</b> <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input checked="" type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed.
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## Stream Photograph Page

Stream ID S-MM29



Photograph Direction East

Date: 09/16/2015

Comments: 2015 stream identification.



Photograph Direction ESE

Date: 11/09/2019

Comments: 2019 stream identification confirmation.



<b>STREAM ID</b> S-MM23	<b>STREAM NAME</b> Maple Branch
<b>LAT</b> 37.043714 <b>LONG</b> -79.823066	<b>DATE</b> 09/16/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> A.Grech, A. Stott, L.Sexton	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>20</u> ft Top of Bank Height: LB <u>5.0</u> ft RB <u>3.0</u> ft Water Depth: <u>18.00</u> in Water Width: <u>12.0</u> ft High Water Mark: <u>3.0</u> ft Flow Direction: <u>North</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 15 % Run 70 % Pool 15 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		50	Detritus	sticks, wood, coarse plant materials (CPOM)	10
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	30			
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input checked="" type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Minnow species present
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed



## Stream Photograph Page

Stream ID S-MM23



Photograph Direction South

Date: 09/16/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-GG4	<b>STREAM NAME</b> UNT to Blackwater River
<b>LAT</b> 37.043006 <b>LONG</b> -79.80905	<b>DATE</b> 07/26/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> P Johnson, M Whitten, C Wharton	
<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 5 ft Top of Bank Height: LB 3.0 ft RB 3.0 ft Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 2.0 ft Flow Direction: North	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input checked="" type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 15 % Run 70 % Pool 15 %  <b>Turbidity</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	25
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")	10	Muck-Mud	black, very fine organic (FPOM)	35
Gravel	2-64 mm (0.1"-2.5")	10			
Sand	0.06-2mm (gritty)	35	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	45			
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input checked="" type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input checked="" type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input checked="" type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Ephemeral Stream flowing north. Stream starts as field ditch that is vegetated, mowed and maintained. It turns into a partially filled old stream that we mapped as S-GG4. Also Mapped stream by NHD system.  Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-GG4



Photograph Direction SSW

Date: 07/26/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

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

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 4 ft Top of Bank Height: LB 40.0 in RB 39.0 in Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 21.0 in Flow Direction: South	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input checked="" type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle % Run % Pool %  <b>Turbidity</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	100
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	80	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Ephemeral stream
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed



## Stream Photograph Page

Stream ID S-A36



Photograph Direction South

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-A38	<b>STREAM NAME</b> UNT to Foul Ground Creek
<b>LAT</b> 37.036383 <b>LONG</b> -79.799586	<b>DATE</b> 04/07/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> Yarbrough, Stoliker, Heule	
<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>9</u> ft Top of Bank Height: LB <u>57.0</u> in RB <u>52.0</u> in Water Depth: <u>0.50</u> in Water Width: <u>48.0</u> in High Water Mark: <u>8.0</u> in Flow Direction: <u>Southeast</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input checked="" type="checkbox"/> Standing water <input type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle % Run % Pool % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	80
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	10			
Sand	0.06-2mm (gritty)	60	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)	30			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Intermittent stream. Possibly channelized. Deep erosion in any case. This stream does have flow further downgradient and within the LOD.
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed



## Stream Photograph Page

Stream ID S-A38



Photograph Direction South

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-A40	<b>STREAM NAME</b> UNT to Foul Ground Creek
<b>LAT</b> 37.036033 <b>LONG</b> -79.799288	<b>DATE</b> 04/07/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> Yarbrough, Stoliker, Heule	
<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>5.8</u> ft Top of Bank Height: LB <u>24.0</u> in RB <u>25.0</u> in Water Depth: <u>4.00</u> in Water Width: <u>30.0</u> ft High Water Mark: <u>15.0</u> in Flow Direction: <u>Southwest</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input checked="" type="checkbox"/> Standing water <input type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle <input type="checkbox"/> % Run <input type="checkbox"/> % Pool 100 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	70
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	45	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	15			
Clay	< 0.004 mm (slick)	40			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input checked="" type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b> _____
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
---------------------------	---

<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Intermittent, braided stream. Tributary to S-A38. Severely downcut. Information listed on this form represents the data collected in 2015. The stream was revisited on 11/09/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-A40



Photograph Direction South

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction South

Date: 11/09/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-A41	<b>STREAM NAME</b> Foul Ground Creek
<b>LAT</b> 37.0315 <b>LONG</b> -79.788427	<b>DATE</b> 04/07/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> Yarbrough, Stoliker, Heule	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>12</u> ft Top of Bank Height: LB <u>33.0</u> in RB <u>48.0</u> in Water Depth: <u>5.00</u> in Water Width: <u>12.0</u> ft High Water Mark: <u>14.0</u> in Flow Direction: <u>Northeast</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 15 % Run 75 % Pool 10 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	10
Boulder	> 256 mm (10")	5			
Cobble	64-256 mm (2.5"-10")	25	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	40			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	15			
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input checked="" type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>
---------------------------	---	--

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Perennial stream with pronounced downcutting. The landowner said the government is working on stream restoration here. Many trees have been planted adjacent to the stream.
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed

## Stream Photograph Page

Stream ID S-A41



Photograph Direction SSW

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 11/10/2019

Comments: 2019 stream identification confirmation.



<b>STREAM ID</b> S-GH36		<b>STREAM NAME</b> UNT Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.031187	<b>LONG</b> -79.778447	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>8.0</u> ft Top of Bank Height: _____ LB <u>6.0</u> ft RB <u>5.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>1.0</u> ft Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Northeast</u>	<b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate (0.5/100 ft) <input type="checkbox"/> Severe (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	<b>FLOW CHARACTERISTICS</b> <b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input checked="" type="checkbox"/> Standing water <input type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> (Only enter if water present) Riffle % Run % Pool % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  Intermittent stream starting from seep under tree roots.
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## Stream Photograph Page

Stream ID S-GH36

Date: 05/25/2016



Photograph Direction SW

Comments:

<b>STREAM ID</b> S-KL17		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.030963	<b>LONG</b> -79.778452	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> E. Foster, J. Cook, K. Pulver			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>7.0</u> ft Top of Bank Height: _____ LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>4.0</u> ft Ordinary High Water Mark (Width): <u>5.0</u> ft Ordinary High Water Mark (Height): <u>4.0</u> in Flow Direction: <u>North</u>	<b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate (0.5/100 ft) <input type="checkbox"/> Severe (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	<b>FLOW CHARACTERISTICS</b> <b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> (Only enter if water present) Riffle 30 % Run 60 % Pool 10 % <b>Turbidity</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  No culvert. Stream modified by channelization.
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## Stream Photograph Page

Stream ID S-KL17

Date: 05/25/2016



Photograph Direction North

Comments:

<b>STREAM ID</b> S-GH37		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.031068	<b>LONG</b> -79.778065	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>7.0</u> ft Top of Bank Height: _____ LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>2.0</u> ft Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>4.0</u> in Flow Direction: <u>Northeast</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b> Intermittent stream starting from seep. Flows into S-GH36 outside of corridor. Wetland W-GH14 is on right bank.
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## Stream Photograph Page

Stream ID S-GH37

Date: 05/25/2016



Photograph Direction SW

Comments:

<b>STREAM ID</b> S-GH38		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.031084	<b>LONG</b> -79.777959	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>5.0</u> ft Top of Bank Height: _____ LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>2.0</u> ft Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>2.0</u> in Flow Direction: <u>Northeast</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft) <b>Stream Erosion</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  Intermittent stream starting from seep and wetland W-GH14. Flow into S-GH37. Wetland W-GH14 is on left bank and at headwaters.
---

## Stream Photograph Page

Stream ID S-GH38

Date: 05/25/2016



Photograph Direction SW

Comments:

<b>STREAM ID</b> S-GH39		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.030868	<b>LONG</b> -79.778138	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>12.0</u> ft Top of Bank Height: _____ LB <u>2.0</u> ft RB <u>5.0</u> ft Water Depth: <u>2.00</u> in Water Width: <u>3.0</u> ft Ordinary High Water Mark (Width): <u>4.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input checked="" type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft) <b>Stream Erosion</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  Furthest east of intermittent streams in complex starting at the pond. This would be considered the main stem water body flowing from the pond.
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## Stream Photograph Page

Stream ID S-GH39

Date: 05/25/2016



Photograph Direction NE

Comments:

<b>STREAM ID</b> S-GH40		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.029265	<b>LONG</b> -79.774628	<b>DATE</b> 05/25/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>8.0</u> ft Top of Bank Height: _____ LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>	<b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Moderate (0.5/100 ft) <input type="checkbox"/> Severe (2 ft/100 ft) (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  Ephemeral stream.
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## Stream Photograph Page

Stream ID S-GH40

Date: 05/25/2016



Photograph Direction SW

Comments:

<b>STREAM ID</b> S-GH44		<b>STREAM NAME</b> UNT to Foul Ground Creek	
<b>CLIENT</b> MVP		<b>PROJECT NAME</b> MVP	
<b>LAT</b> 37.028527	<b>LONG</b> -79.773483	<b>DATE</b> 05/27/2016	<b>COUNTY</b> Franklin
<b>INVESTIGATORS</b> K. Larsen, D. McCullough, L. Sexton			
<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>8.0</u> ft Top of Bank Height: _____ LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>4.00</u> in Water Width: <u>3.0</u> ft Ordinary High Water Mark (Width): <u>6.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>North</u>	<b>Sinuosity</b> <input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft) <b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Within Roadside Ditch</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Culvert Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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<b>MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS</b>  Snails, damselfly larva, crayfish burrows.  A significant braid exists with a floodplain skunk-cabbage wetland encompassing most of the island.
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## Stream Photograph Page

Stream ID S-GH44

Date: 05/27/2016



Photograph Direction South

Comments:

<b>STREAM ID</b> S-G22	<b>STREAM NAME</b> UNT to Poplar Camp Creek
<b>LAT</b> 37.019567 <b>LONG</b> -79.762041	<b>DATE</b> 04/03/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> G. Stevens, A. Rodrian, S. Kelly	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 12 ft Top of Bank Height: LB 4.0 ft RB 4.0 ft Water Depth: 6.00 in Water Width: 3.0 ft High Water Mark: 4.0 ft Flow Direction: East	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy  <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Sinuosity</b> <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High  <b>Gradient</b> <input checked="" type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water  <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 50 % Run 25 % Pool 20 %  <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		20	Detritus	sticks, wood, coarse plant materials (CPOM)	45
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")	40	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	15			
Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)	5			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous
	<b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input checked="" type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft  <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b>

<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed
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## Stream Photograph Page

Stream ID S-G22



Photograph Direction West

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 11/10/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-G23	<b>STREAM NAME</b> UNT to Poplar Camp Creek
<b>LAT</b> 37.01941 <b>LONG</b> -79.761976	<b>DATE</b> 04/03/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> G. Stevens, A. Rodrian, S. Kelly	
<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>3</u> ft Top of Bank Height: LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>1.00</u> in Water Width: <u>1.0</u> ft High Water Mark: <u>2.0</u> ft Flow Direction: <u>North</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input checked="" type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 20 % Run 80 % Pool % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		20	Detritus	sticks, wood, coarse plant materials (CPOM)	90
Boulder	> 256 mm (10")	40			
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	5			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b> _____
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Flows into SG22
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed



## Stream Photograph Page

Stream ID S-G23



Photograph Direction West

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction West

Date: 11/10/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-G21	<b>STREAM NAME</b> UNT to Poplar Camp Creek
<b>LAT</b> 37.019445 <b>LONG</b> -79.761664	<b>DATE</b> 04/03/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> G. Stevens, A. Rodrian, S. Kelly	
<b>FLOW REGIME</b> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: 3 ft Top of Bank Height: LB 6.0 in RB 6.0 in Water Depth: 1.00 in Water Width: 1.0 ft High Water Mark: 1.0 ft Flow Direction: North	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input checked="" type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 5 % Run 90 % Pool 5 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	80	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)	20			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other:	<b>Indicate the dominant type (Check one)</b> <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input checked="" type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Wetland ID</b> VV-B1T
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Hillside stream flows into SG22
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed

## Stream Photograph Page

Stream ID S-G21



Photograph Direction North

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 11/10/2019

Comments: 2019 stream identification confirmation.

<b>STREAM ID</b> S-G20	<b>STREAM NAME</b> Poplar Camp Creek
<b>LAT</b> 37.017404 <b>LONG</b> -79.759961	<b>DATE</b> 04/03/2015
<b>CLIENT</b> MVP	<b>PROJECT NAME</b> MVP
<b>INVESTIGATORS</b> G. Stevens, A. Rodrian, S. Kelly	
<b>FLOW REGIME</b> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	<b>WATER TYPE</b> TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

<b>CHANNEL FEATURES</b>	<b>Estimate Measurements</b> Top of Bank Width: <u>10</u> ft Top of Bank Height: LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>1.00</u> ft Water Width: <u>7.0</u> ft High Water Mark: <u>8.0</u> ft Flow Direction: <u>Northeast</u>	<b>Stream Erosion</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Artificial, Modified or Channelized</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Dam Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sinuosity</b> <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <b>Gradient</b> <input checked="" type="checkbox"/> Flat (0.5/100 ft) <input type="checkbox"/> Moderate (2 ft/100 ft) <input type="checkbox"/> Severe (10 ft/100 ft)
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<b>FLOW CHARACTERISTICS</b>	<b>Water Present</b> <input type="checkbox"/> No water, stream bed dry <input type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input checked="" type="checkbox"/> Flowing water <b>Velocity</b> <input checked="" type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	<b>Proportion of Reach Represented by Stream Morphology Types</b> Riffle 40 % Run 30 % Pool 30 % <b>Turbidity</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
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INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock		20	Detritus	sticks, wood, coarse plant materials (CPOM)	25
Boulder	> 256 mm (10")	20			
Cobble	64-256 mm (2.5"-10")	10	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	20			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)	10			

<b>WATERSHED FEATURES</b>	<b>Predominant Surrounding Landuse</b> <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____ <b>Canopy Cover</b> <input type="checkbox"/> Partly open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	<b>Indicate the dominant type (Check one)</b> <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <b>Floodplain Width</b> <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft <b>Wetland Present</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Wetland ID</b> _____
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<b>AQUATIC VEGETATION</b>	<b>Indicate the dominant type and record the dominant species present</b> <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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<b>MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES</b>	Fish
	Information listed on this form represents the data collected in 2015. The stream was revisited on 11/10/2019. The presence of a stream channel and OHWM was confirmed



## Stream Photograph Page

Stream ID S-G20



Photograph Direction SSW

Date: 04/03/2015

Comments: 2015 stream identification.



Photograph Direction NNE

Date: 11/10/2019

Comments: 2019 stream identification confirmation.