

STREAM ID S-IJ18-INT		STREAM NAME UNT to Sinking Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.322078	LONG -80.552834	DATE 04/14/2016	COUNTY Giles
INVESTIGATORS E. Foster, S. Lieb, J. Niergarth			
WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>4.0</u> ft Top of Bank Height: _____ LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>2.00</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>6.0</u> in Flow Direction: <u>Southwest</u>	Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	FLOW CHARACTERISTICS Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle 50 % Run 25 % Pool 25 % Turbidity <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>> 256 mm (10")</td> <td>40</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>20</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>< 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")	40	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)	20	Marl	grey, shell fragments		Silt	0.004-0.06 mm	20	Clay	< 0.004 mm (slick)	
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Stream Photograph Page

Stream ID S-IJ18-INT

Date: 04/14/2016



Photograph Direction NE

Comments:

STREAM ID S-PP22		STREAM NAME UNT to Craig Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.321203	LONG -80.412889	STATE Virginia	COUNTY Craig
INVESTIGATORS KP JC		DATE 10/29/2019	
WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements 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>0.25</u> in Water Width: <u>1.0</u> ft Ordinary High Water Mark (Width): <u>2.0</u> ft Ordinary High Water Mark (Height): <u>2.0</u> in Flow Direction: <u>Southwest</u>	Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS S-PP22 was originally delineated in 2015 and then revisited in 2019. The stream was extended during the 2019 revisit. Channel flow as well as bed and bank characteristic through the ROW/LOD were observed at the time of survey. In 2015, the stream flow went subsurface and lost evidence of bed, bank, and OHWM characteristics within the ROW. After ROW clearing for pipeline construction, it appears the stream has expressed water flow on the surface and bed and bank characteristics have become more established downslope.
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Stream Photograph Page

Stream ID S-PP22 Date 10/29/2019



Photograph Number 1

Photograph Direction NE

Comments: Upstream



Photograph Number 2

Photograph Direction South

Comments: Downstream

STREAM ID W-0012		STREAM NAME UNT to Sinking Creek	
LAT 37.318759 LONG -80.440048		DATE 08/27/2015	
CLIENT MAM		PROJECT NAME MVP	
INVESTIGATORS A. rodrian, L. sexton, C. Wharton			
FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 2.0 ft Top of Bank Height: LB 4.0 in RB 4.0 in Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 4.0 in Flow Direction: West	Stream Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 0 % Run 0 % Pool 0 % Turbidity <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		0	Detritus	sticks, wood, coarse plant materials (CPOM)	20
Boulder	> 256 mm (10")	25			
Cobble	64-256 mm (2.5"-10")	25	Muck-Mud	black, very fine organic (FPOM)	0
Gravel	2-64 mm (0.1"-2.5")	35			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	0			
Clay	< 0.004 mm (slick)	0			

WATERSHED FEATURES	Predominant Surrounding Landuse <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: Canopy Cover <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID
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AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Large culvert under railroad tracks, confluence with S-C-21 off corridor
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Stream Photograph Page

Stream ID W-0012



Photograph Direction East

Date: 08/27/2015

Comments: 2015 stream identification.



Photograph Direction ESE

Date: 10/29/2019

Comments: 2019 stream identification confirmation.

STREAM ID W-0013		STREAM NAME UNT to Sinking Creek	
LAT 37.318873 LONG -80.441638		DATE 08/27/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS A. rodrian, L. sexton, C. Wharton			
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>20.0</u> ft Top of Bank Height: LB <u>4.0</u> in RB <u>4.0</u> in Water Depth: <u>3.00</u> in Water Width: <u>18.0</u> ft High Water Mark: <u>4.0</u> in Flow Direction: <u>North</u>	Stream Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 90 % Run 0 % Pool 10 % Turbidity <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		0	Detritus	sticks, wood, coarse plant materials (CPOM)	30
Boulder	> 256 mm (10")	40			
Cobble	64-256 mm (2.5"-10")	25			
Gravel	2-64 mm (0.1"-2.5")	35	Muck-Mud	black, very fine organic (FPOM)	0
Sand	0.06-2mm (gritty)	0	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	0			
Clay	< 0.004 mm (slick)	0			

WATERSHED FEATURES	Predominant Surrounding Landuse <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: _____ Canopy Cover <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID
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AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	
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Stream Photograph Page

Stream ID W-0013



Photograph Direction West

Date: 08/27/2015

Comments: 2015 stream identification.



Photograph Direction SSE

Date: 10/29/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-0014		STREAM NAME UNT to Sinking Creek	
LAT 37.318549 LONG -80.441615		DATE 08/27/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS A. rodrian, L. sexton, C. Wharton			
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 4.0 ft Top of Bank Height: LB 1.0 ft RB 1.0 ft Water Depth: 2.00 in Water Width: 4.0 ft High Water Mark: 4.0 in Flow Direction: S	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input checked="" type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 65 % Run 30 % Pool 5 % Turbidity <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		10	Detritus	sticks, wood, coarse plant materials (CPOM)	30
Boulder	> 256 mm (10")	40			
Cobble	64-256 mm (2.5"-10")	25	Muck-Mud	black, very fine organic (FPOM)	0
Gravel	2-64 mm (0.1"-2.5")	25			
Sand	0.06-2mm (gritty)	0	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	0			
Clay	< 0.004 mm (slick)	0			

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

AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	
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Stream Photograph Page

Stream ID S-0014

Date: 08/27/2015



Photograph Direction South

Comments:

STREAM ID S-IJ17		STREAM NAME UNT to Sinking Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.318485	LONG -80.547827	DATE 04/14/2016	COUNTY Giles
INVESTIGATORS E. Foster, S. Lieb, J. Niergarth			
WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>		FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>8.0</u> ft Top of Bank Height: _____ LB <u>4.0</u> ft RB <u>4.0</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>Southeast</u>	Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	FLOW CHARACTERISTICS Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle % Run % Pool % Turbidity <input 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">40</td> </tr> <tr> <td>Boulder</td> <td>> 256 mm (10")</td> <td>30</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>30</td> </tr> <tr> <td>Sand</td> <td>0.06-2mm (gritty)</td> <td>10</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>< 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)	40	Boulder	> 256 mm (10")	30	Cobble	64-256 mm (2.5"-10")	30	Muck-Mud	black, very fine organic (FPOM)		Gravel	2-64 mm (0.1"-2.5")	30	Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments		Silt	0.004-0.06 mm		Clay	< 0.004 mm (slick)	
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Stream Photograph Page

Stream ID S-IJ17

Date: 04/14/2016



Photograph Direction East

Comments:

STREAM ID S-IJ16-b		STREAM NAME UNT to Sinking Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.318336	LONG -80.547623	DATE 04/14/2016	COUNTY Giles
INVESTIGATORS E. Foster, S. Lieb, J. Niergarth			
WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>		FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>10.0</u> ft Top of Bank Height: _____ LB <u>6.0</u> ft RB <u>6.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>5.0</u> ft Ordinary High Water Mark (Height): <u>24.0</u> in Flow Direction: <u>Southeast</u>	Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	FLOW CHARACTERISTICS Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle % Run % Pool % Turbidity <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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WATERSHED FEATURES	Predominant Surrounding Landuse <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: _____ Canopy Cover <input type="checkbox"/> Open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded																																											
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Stream Photograph Page

Stream ID S-IJ16-b

Date: 04/14/2016



Photograph Direction SE

Comments:

STREAM ID S-PP21	STREAM NAME UNT to Craig Creek
LAT 37.31716709 LONG -80.40925493	DATE 10/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck, T. Woods, D. McCollough	
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 4 ft Top of Bank Height: LB 0.5 ft RB 0.5 ft Water Depth: 3.00 in Water Width: 2.5 ft High Water Mark: 10.0 in Flow Direction: Southwest	Stream Erosion <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 10 % Run 70 % Pool 20 % Turbidity <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")	10			
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	30			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	20			
Clay	< 0.004 mm (slick)				

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

AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	The stream was visited by the USACE in 2017. The presence of a stream channel and an OHWM was confirmed.
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Stream Photograph Page

Stream ID S-PP21

Date: 10/17/2015



Photograph Direction South

Comments:

STREAM ID S-PP20	STREAM NAME UNT to Craig Creek
LAT 37.3165383 LONG -80.4086392	DATE 10/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. Hadersbeck, T. Woods, D. McCollough	
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 6 ft Top of Bank Height: LB 1.0 ft RB 1.0 ft Water Depth: 4.00 in Water Width: 3.0 ft High Water Mark: 10.0 in Flow Direction: Southwest	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 10 % Run 70 % Pool 20 % Turbidity <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")	10			
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	30			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	20			
Clay	< 0.004 mm (slick)				

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

AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	The stream was revisited by the USACE in 2017. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-PP20

Date: 10/17/2015



Photograph Direction SW

Comments:

STREAM ID S-RR13	STREAM NAME Craig Creek
LAT 37.314425 LONG -80.40287336	DATE 09/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Cook, R. Keyser, D. McCullough	
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>35</u> ft Top of Bank Height: LB <u>48.0</u> in RB <u>40.0</u> in Water Depth: <u>3.00</u> in Water Width: <u>15.0</u> ft High Water Mark: <u>9.0</u> in Flow Direction: <u>Northeast</u>		Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> High Gradient <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)		
	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow		Proportion of Reach Represented by Stream Morphology Types Riffle 35 % Run 30 % Pool 40 % Turbidity <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 _____		
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)	40
Boulder	> 256 mm (10")	15			
Cobble	64-256 mm (2.5"-10")	35	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	30			
Sand	0.06-2mm (gritty)	20	Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				
WATERSHED FEATURES	Predominant Surrounding Landuse <input 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: _____ Canopy Cover <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open		Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID _____		
	AQUATIC VEGETATION Indicate the dominant type and record the dominant species present <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				

MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	
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Stream Photograph Page

Stream ID S-RR13

Date: 09/14/2015



Photograph Direction NE

Comments:

STREAM ID S-HH18	STREAM NAME UNT to Craig Creek
LAT 37.31421359 LONG -80.39862398	DATE 10/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS S Ryan, A Larson, M Whitten, A Carrano	
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 6 ft Top of Bank Height: LB 3.0 ft RB 2.0 ft Water Depth: 2.00 in Water Width: 2.0 ft High Water Mark: 2.0 in Flow Direction: Northeast	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 10 % Run 60 % Pool 30 % Turbidity <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		60	Detritus	sticks, wood, coarse plant materials (CPOM)	10
Boulder	> 256 mm (10")	5			
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")	15			
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

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

AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Stream joins S-HH17. - 2015 comments Stream was revisited and extended in 2016. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-HH18

Date: 10/17/2015



Photograph Direction NE

Comments:

STREAM ID S-RR14	STREAM NAME UNT to Craig Creek
LAT 37.31398483 LONG -80.40243974	DATE 09/14/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J. Cook, R. Keyser, D. McCullough	
FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: 7 ft Top of Bank Height: LB 2.0 ft RB 18.0 in Water Depth: 0.00 in Water Width: 0.0 ft High Water Mark: 3.0 in Flow Direction: North	Stream Erosion <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle % Run % Pool % Turbidity <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)	10
Boulder	> 256 mm (10")	10			
Cobble	64-256 mm (2.5"-10")	30			
Gravel	2-64 mm (0.1"-2.5")	35	Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2mm (gritty)	25			
Silt	0.004-0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 mm (slick)				

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

AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	The stream was revisited and extended in 2016. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-RR14

Date: 09/14/2015



Photograph Direction North

Comments:

STREAM ID S-006		STREAM NAME Craig Creek	
LAT 37.313034 LONG -80.405281		DATE 08/22/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS A. rodrian, L. sexton, C. Wharton			
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>10.0</u> ft Top of Bank Height: LB <u>3.0</u> ft RB <u>1.0</u> ft Water Depth: <u>4.00</u> in Water Width: <u>3.0</u> ft High Water Mark: <u>1.0</u> ft Flow Direction: <u>E</u>	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 35 % Run 50 % Pool 15 % Turbidity <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		10	Detritus	sticks, wood, coarse plant materials (CPOM)	15
Boulder	> 256 mm (10")	30			
Cobble	64-256 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	0
Gravel	2-64 mm (0.1"-2.5")	25			
Sand	0.06-2mm (gritty)	15	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	0			
Clay	< 0.004 mm (slick)	0			

WATERSHED FEATURES	Predominant Surrounding Landuse <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: _____ Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID
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AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	The stream was revisited and extended on 10/17/2016. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-006



Photograph Direction East

Date: 08/22/2015

Comments: 2015 stream identification.



Photograph Direction South

Date: 10/17/2016

Comments: 2016 stream extension

STREAM ID S-QQ3		STREAM NAME UNT to Sinking Creek	
LAT 37.311638 LONG -80.532287		DATE 09/25/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS A lands, S. Kite			
FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>0.00</u> ft Water Width: <u>0.0</u> ft High Water Mark: <u>1.0</u> ft Flow Direction: <u>South</u>		Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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)																																												
	Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow		Proportion of Reach Represented by Stream Morphology Types Riffle 50 % Run 50 % Pool % Turbidity <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 _____																																												
<table border="1" style="width:100%"> <thead> <tr> <th colspan="3">INORGANIC SUBSTRATE COMPONENTS (should add up to 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">5</td> </tr> <tr> <td>Boulder</td> <td>> 256 mm (10")</td> <td>15</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>15</td> </tr> <tr> <td>Sand</td> <td>0.06-2mm (gritty)</td> <td>10</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>< 0.004 mm (slick)</td> <td>10</td> </tr> </tbody> </table>						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)	5	Boulder	> 256 mm (10")	15	Cobble	64-256 mm (2.5"-10")	30	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	20	Clay	< 0.004 mm (slick)	10
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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/28/2019. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-QQ3



Photograph Direction South

Date: 09/25/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: 10/28/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-IJ16-a		STREAM NAME UNT to Sinking Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.312727	LONG -80.545009	DATE 04/14/2016	COUNTY Giles
INVESTIGATORS E. Foster, S. Lieb, J. Niergarth			
WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>		FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>7.0</u> ft Top of Bank Height: _____ LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</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>South</u>	Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Culvert Material: <u>Corrugated Metal</u> Culvert Size: <u>24</u> in																																										
	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle <input type="checkbox"/> % Run <input type="checkbox"/> % Pool <input type="checkbox"/> % Turbidity <input 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%) <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">15</td> </tr> <tr> <td>Boulder</td> <td>> 256 mm (10")</td> <td>40</td> </tr> <tr> <td>Cobble</td> <td>64-256 mm (2.5"-10")</td> <td>20</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>20</td> </tr> <tr> <td>Sand</td> <td>0.06-2mm (gritty)</td> <td>10</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>10</td> </tr> <tr> <td>Clay</td> <td>< 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)	15	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")	20	Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments		Silt	0.004-0.06 mm	10	Clay	< 0.004 mm (slick)	
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WATERSHED FEATURES	Predominant Surrounding Landuse <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: _____ Canopy Cover <input type="checkbox"/> Open <input checked="" type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded		Floodplain Width <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <15ft																																									

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Stream Photograph Page

Stream ID S-IJ16-a

Date: 04/14/2016



Photograph Direction South

Comments:

STREAM ID S-NN17	STREAM NAME Sinking Creek
LAT 37.311354 LONG -80.516414	DATE 08/29/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS D. McCullough, K. Larsen, R. Turner, C. Carver	
FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>70.0</u> ft Top of Bank Height: LB <u>4.0</u> ft RB <u>5.0</u> ft Water Depth: <u>1.00</u> ft Water Width: <u>30.0</u> ft High Water Mark: <u>2.0</u> ft Flow Direction: <u>Southwest</u>	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 60 % Run 35 % Pool 5 % Turbidity <input checked="" 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		0	Detritus	sticks, wood, coarse plant materials (CPOM)	10
Boulder	> 256 mm (10")	15			
Cobble	64-256 mm (2.5"-10")	45	Muck-Mud	black, very fine organic (FPOM)	0
Gravel	2-64 mm (0.1"-2.5")	25			
Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	5			
Clay	< 0.004 mm (slick)	0			

WATERSHED FEATURES	Predominant Surrounding Landuse <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Other: _____ Canopy Cover <input checked="" type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded <input type="checkbox"/> Open	Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID _____
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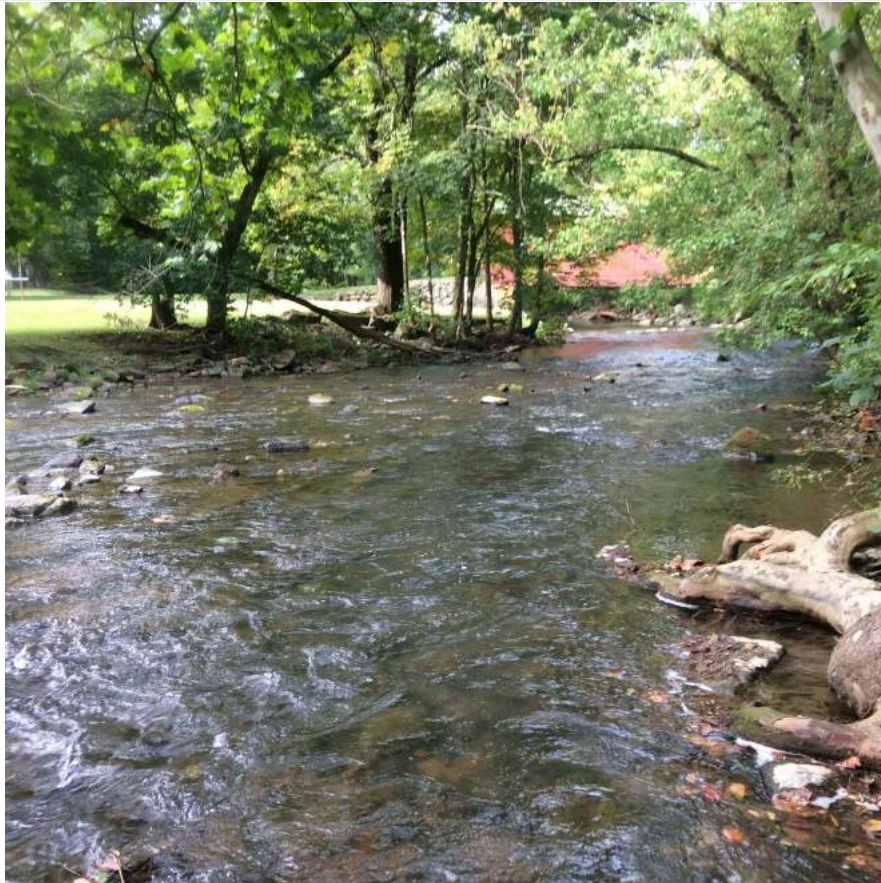
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating algae <input type="checkbox"/> Attached algae
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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Macroinvertebrates include snails and worms. Small fish and raccoon tracks observed. - 2015 comments Stream was revisited and extended in 2016. The presence of a stream channel and OHWM was confirmed.
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Stream Photograph Page

Stream ID S-NN17

Date: 08/29/2015



Photograph Direction SW

Comments:

STREAM ID S-KL43		STREAM NAME UNT to Sinking Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.307576	LONG -80.466823	DATE 09/07/2016	COUNTY Giles
INVESTIGATORS J. Cook, S. Pilcher, S. Therkildson			
WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

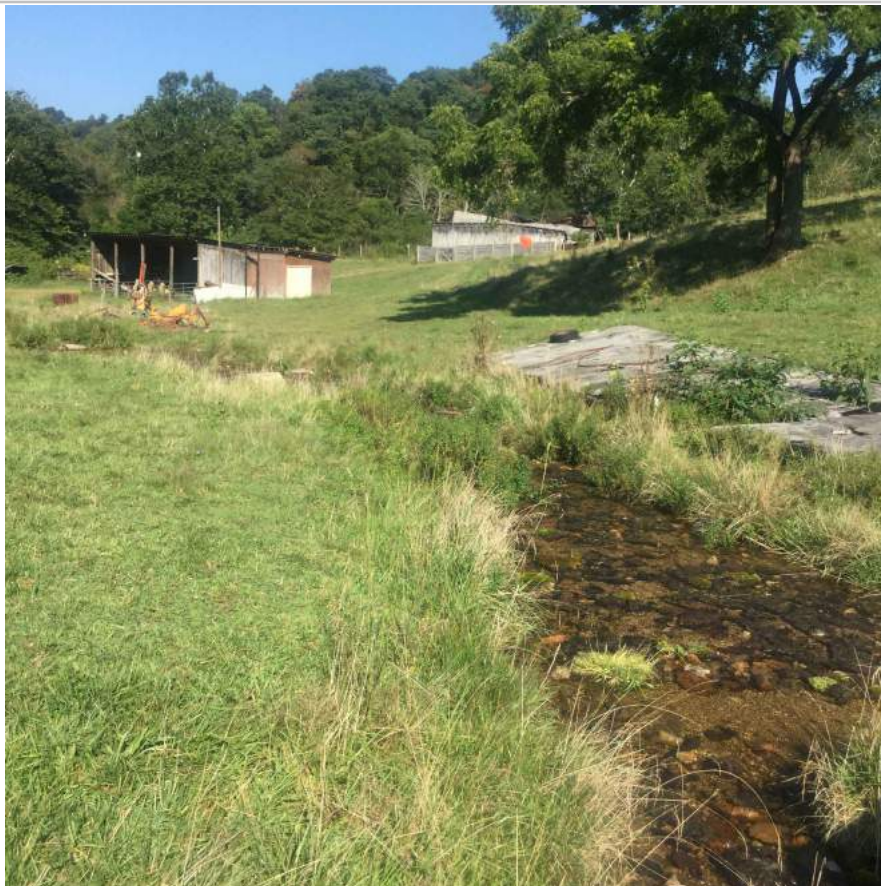
CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>10.0</u> ft Top of Bank Height: _____ LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>3.00</u> in Water Width: <u>8.0</u> ft Ordinary High Water Mark (Width): <u>8.0</u> ft Ordinary High Water Mark (Height): <u>3.0</u> in Flow Direction: <u>Northwest</u>	Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input type="checkbox"/> None <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	FLOW CHARACTERISTICS Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle 50 % Run 50 % Pool % Turbidity <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Impacted by cows.
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Stream Photograph Page

Stream ID S-KL43

Date: 09/07/2016



Photograph Direction West

Comments:

STREAM ID S-NN11		STREAM NAME UNT to Sinking Creek	
LAT 37.30593 LONG -80.467533		DATE 08/27/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS D. McCullough, K. Larsen, R. Turner			
FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>5.0</u> ft Top of Bank Height: LB <u>0.5</u> ft RB <u>1.0</u> ft Water Depth: <u>0.50</u> in Water Width: <u>2.0</u> ft High Water Mark: <u>2.0</u> in Flow Direction: <u>North</u>	Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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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FLOW CHARACTERISTICS	Water Present <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 Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types Riffle 60 % Run 10 % Pool 30 % Turbidity <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		30	Detritus	sticks, wood, coarse plant materials (CPOM)	10
Boulder	> 256 mm (10")	15			
Cobble	64-256 mm (2.5"-10")	25	Muck-Mud	black, very fine organic (FPOM)	0
Gravel	2-64 mm (0.1"-2.5")	20			
Sand	0.06-2mm (gritty)	10	Marl	grey, shell fragments	0
Silt	0.004-0.06 mm	0			
Clay	< 0.004 mm (slick)	0			

WATERSHED FEATURES	Predominant Surrounding Landuse <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Other: _____ Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open	Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous Floodplain Width <input checked="" type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID
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AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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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MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Unnamed tributary to Sinking Creek
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Stream Photograph Page

Stream ID S-NN11



Photograph Direction SSE

Date: 08/27/2015

Comments: 2015 stream identification.



Photograph Direction SE

Date: 10/29/2019

Comments: 2019 stream identification confirmation.

STREAM ID S-NN12		STREAM NAME UNT to Sinking Creek	
LAT 37.300333 LONG -80.472927		DATE 08/27/2015	
CLIENT MVP		PROJECT NAME MVP	
INVESTIGATORS D. McCullough, K. Larsen, R. Turner			
FLOW REGIME Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/>		WATER TYPE TNW <input type="checkbox"/> RPW <input type="checkbox"/> NRPW <input checked="" type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>0.5</u> ft RB <u>0.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft High Water Mark: <u>2.0</u> in Flow Direction: <u>North</u>		Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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)		
	Water Present <input type="checkbox"/> No water, stream bed dry <input checked="" type="checkbox"/> Stream bed moist <input type="checkbox"/> Standing water <input type="checkbox"/> Flowing water Velocity <input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow		Proportion of Reach Represented by Stream Morphology Types Riffle % Run % Pool % Turbidity <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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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")	10			
Cobble	64-256 mm (2.5"-10")	10			
Gravel	2-64 mm (0.1"-2.5")	20	Muck-Mud	black, very fine organic (FPOM)	0
Sand	0.06-2mm (gritty)	10			
Silt	0.004-0.06 mm	50	Marl	grey, shell fragments	0
Clay	< 0.004 mm (slick)	0			
WATERSHED FEATURES	Predominant Surrounding Landuse <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: _____		Indicate the dominant type (Check one) <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous		
	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input checked="" type="checkbox"/> Shaded <input type="checkbox"/> Open		Floodplain Width <input type="checkbox"/> Wide > 30ft <input type="checkbox"/> Moderate 15-30ft <input checked="" type="checkbox"/> Narrow <16ft Wetland Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Wetland ID _____		
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <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				

MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Unnamed ephemeral stream. Fed by seep near western edge of corridor, where stream turns intermittent.
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Stream Photograph Page

Stream ID S-NN12



Photograph Direction North

Date: 08/27/2015

Comments: 2015 stream identification.



Photograph Direction NW

Date: _____

Comments: 2019 stream identification confirmation.

STREAM ID S-MN21		STREAM NAME UNT to Mill Creek	
CLIENT MVP		PROJECT NAME MVP	
LAT 37.299442	LONG -80.391223	DATE 05/11/2017	COUNTY Montgomery
INVESTIGATORS S Ryan, K Pulver, H Phelan			
WATER TYPE TNW <input type="checkbox"/> RPW <input checked="" type="checkbox"/> NRPW <input type="checkbox"/>		FLOW REGIME Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral <input type="checkbox"/>	

CHANNEL FEATURES	Estimate Measurements Top of Bank Width: <u>7.0</u> ft Top of Bank Height: _____ LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>3.00</u> in Water Width: <u>3.0</u> ft Ordinary High Water Mark (Width): <u>5.0</u> ft Ordinary High Water Mark (Height): <u>7.0</u> in Flow Direction: <u>Southwest</u>	Sinuosity <input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High Gradient <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) Stream Erosion <input checked="" type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy Artificial, Modified or Channelized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Within Roadside Ditch <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Culvert Material: _____ Culvert Size: _____ in																																										
	FLOW CHARACTERISTICS Water Present <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 Velocity <input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow	Proportion of Reach Represented by Stream Morphology Types (Only enter if water present) Riffle 15 % Run 65 % Pool 20 % Turbidity <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____																																										
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MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS Source (seep) observed approx 50 ft outside ROW. Salamanders observed in stream.

Stream Photograph Page

Stream ID S-MN21

Date: 05/11/2017



Photograph Direction NE

Comments: