#### **Baseline Assessment – Stream Attributes**

# Reach S-A120 TEMP AR 1 (Temporary Access Road) Intermittent Spread A Wetzel County, West Virginia

Data	Included
Photos	✓
SWVM Form	✓
FCI Calculator and HGM Form	✓
RBP Physical Characteristics Form	✓
Water Quality Data	✓ Low DO readings due to standing water and low flow
RBP Habitat Form	✓
RBP Benthic Form	✓
Benthic Identification Sheet	N/A – Low flow
Wolman Pebble Count	✓
Reference Reach Software Pebble Count Data	<b>√</b>
Longitudinal Profile and Cross Sections	<b>√</b>



Photo Type: DS, US View Location, Orientation, Photographer Initials: Downstream Edge of ROW, Upstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: DS, DS View
Location, Orientation, Photographer Initials: Downstream Edge of ROW, Downstream View, BC/DP
Lat:39.489914 Long: -80.522135



Photo Type: US View at Center Location, Orientation, Photographer Initials: Center ROW, Upstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: DS View at Center
Location, Orientation, Photographer Initials: ROW Center, Downstream View, BC/DP
Lat:39.489914 Long: -80.522135



Photo Type: US, US View Location, Orientation, Photographer Initials: Upstream Edge of ROW, Upstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: US, DS View Location, Orientation, Photographer Initials: Upstream Edge of ROW, Downstream View, BC/DP Lat:39.489914 Long: -80.522135

Spread A Stream S-A120 TEMP AR 1 (Temporary Access Road) Wetzel County

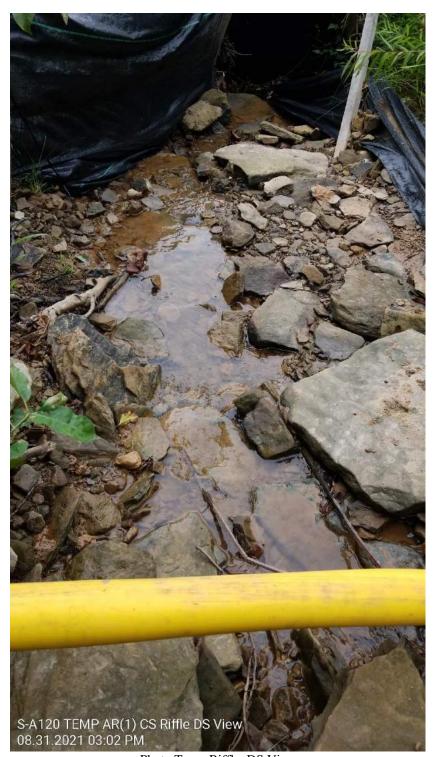


Photo Type: Riffle, DS View Location, Orientation, Photographer Initials: Upstream of Riffle, Downstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: Riffle, US View Location, Orientation, Photographer Initials: Downstream of Riffle, Upstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: Pool, DS View Location, Orientation, Photographer Initials: Upstream of Pool, Downstream View, BC/DP Lat:39.489914 Long: -80.522135



Photo Type: Pool, US View Location, Orientation, Photographer Initials: Downstream of Pool, Upstream View, BC/DP Lat:39.489914 Long: -80.522135

Column No. 1-pages Excitory Constitution (Particle Control C	USACE FILE NO./ Project Name: (v2.1, Sept 2015)		Mounta	in Valley Pipeline	IMPACT COORDINATES (in Decimal Degrees)	Lat.	39.489914	Lon.	-80.522135	WEATHER:		Sunny	DATE:	August 26	8, 2021
March   Marc				S-A120	TEMP AR 1								Comments:		
Mathematical Control State   Mathematical C	STREAM IMPACT LENGTH:	8		RESTORATION (Levels I-III)		Lat.		Lon.		PRECIPITATION PAST 48 HRS:			Mitigation Length:		
Proceed States Channel Stops	Column No. 1- Impact Existing	g Condition (De	bit)	Column No. 2- Mitigation Existing	Condition - Baseline (Credit)				Years			irs	Column No. 5- Mitigation Project	ted at Maturity (Cre	edit)
Cold Score (patch size from 1   1   1   1   1   1   1   1   1   1	Stream Classification:	Intern	nittent	Stream Classification:			Stream Classification:		0	Stream Classification:	0	1	Stream Classification:	0	
Part	Percent Stream Channel SI	lope	9	Percent Stream Channel S	Горе		Percent Stream Chann	el Slope	0	Percent Stream Channel S	Slope	0	Percent Stream Channel S	lope	0
Marie	HGM Score (attach d	lata forms):		HGM Score (attach	data forms):		HGM Score (at	tach data forms):		HGM Score (attach	data forms):		HGM Score (attach d	lata forms):	
Employed   1			Average		Average				Average			Average			Average
Mart   Project   Chemical and Biological Indications   Part   Part   Project   Chemical And Biological Indications   Part	Hydrology									Hydrology			Hydrology		
## PATT - Physics, Chemical and Biological Indicators   PATT - Physics, Chemical and Biological Indicators	Biogeochemical Cycling		0.47333333		0				0			0			0
PMYSICAL NDICATOR (upples to all element constructions)   PMYSICAL NDICA	PART I - Physical, Chemical and		cators		nd Biological Indicators			cal and Biological In	dicators		d Biological Indica	ators		I Biological Indicat	tors
Page		Points Scale Range	Site Score		Points Scale Range Site Score			Points Scale Rang	s Site Score		Points Scale Range	Site Score		Points Scale Range	Site Score
Egithand Schottenschrabitistic Core   2-2-	PHYSICAL INDICATOR (Applies to all streams	s classifications)		PHYSICAL INDICATOR (Applies to all streams	s classifications)		PHYSICAL INDICATOR (Applies to all str	reams classifications)		PHYSICAL INDICATOR (Applies to all stream	ns classifications)		PHYSICAL INDICATOR (Applies to all streams	s classifications)	
Egithand Schottenschrabitistic Core   2-2-	USEPA RBP (High Gradient Data Sheet)			USEPA RBP (Low Gradient Data Sheet)			USEPA RBP (High Gradient Data She	et)		USEPA RBP (High Gradient Data Sheet)			USEPA RBP (High Gradient Data Sheet)		
3. New Conf. pop Regime	Epifaunal Substrate/Available Cover	0-20		Epifaunal Substrate/Available Cover	0-20		Epifaunal Substrate/Available Cover	0-20		<ol> <li>Epifaunal Substrate/Available Cover</li> </ol>	0-20		Epifaunal Substrate/Available Cover	0-20	
	2. Embeddedness														
5. Charried Flow Status	Velocity/ Depth Regime		12				3. Velocity/ Depth Regime								
Control Alluration			7			-									
Frequency of Riffes (or bands)															
B. Bank Stability (LB A R9)						-									
Augustup Protection (ILB A RB)   0.00   1   1   1   1   1   1   1   1   1						-									
10. Riguriar Vegetime Zone Worth (1.6. # 180)   0.30   10. Riguriar Vegetime Zone Worth (1.6. # 180)   0. Riguriar Vegetime Zone Worth (1.6. # 1															
Sub-Total   0.535   Sub-Total   0   CHEMICAL NDICATOR (Applies to Intermittent and Percential Streams)	Riparian Vegetative Zone Width (LB & RB)		8												
CHEMICAL INDICATOR (Applies to Intermittent and Perennial Streams)  WYDEP Water Quality Indicators (General) Specific Conductivity  Specific Conduc	Total RBP Score	Marginal		Total RBP Score	Poor 0		Total RBP Score	Poor	0	Total RBP Score	Poor		Total RBP Score	Poor	
W/DEP Water Quality Indicators (General)   Specific Conductivity   Specific	Sub-Total		0.535	Sub-Total	0		Sub-Total		0	Sub-Total		0	Sub-Total		. 0
Specific Conductivity  30 30 309 - 70 points	CHEMICAL INDICATOR (Applies to Intermitter	nt and Perennial St	reams)	CHEMICAL INDICATOR (Applies to Intermitte	nt and Perennial Streams)		CHEMICAL INDICATOR (Applies to Inter	mittent and Perennial S	treams)	CHEMICAL INDICATOR (Applies to Intermitte	ent and Perennial Stre	eams)	CHEMICAL INDICATOR (Applies to Intermittee	nt and Perennial Stream	ms)
300-590 - 70 points	WVDEP Water Quality Indicators (General	Ŋ		WVDEP Water Quality Indicators (General	)		WVDEP Water Quality Indicators (Ger	neral)		WVDEP Water Quality Indicators (General	al)		WVDEP Water Quality Indicators (General	.l)	
30-300-70 points   30-300 - 70 points   30-300   - 70 points   30-30	Specific Conductivity			Specific Conductivity			Specific Conductivity			Specific Conductivity			Specific Conductivity		
BH   So   So   So   So   So   So   So   S	300-399 - 70 points	0-90	355		0-90			0-90			0-90			0-90	
DO	pH			pH			pH			pH			pH		
6.0-8.0 = 80 points   10-30   1.6.2		0-80	7.7		5-90 0-1			5-90 0-1			5-90 0-1			5-90 0-1	
Sub-Total   10-30				200			20			20			20	/	
Sub-Total 0.8 Su	БО	40.20	4.62	UU	40.20		DO	40.30		DO	40.20		DU	10.20	
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Index Linear Feet Unit Score Index Linear Fee	Sub-Total	1 1	0	Sub-Total	0		Sub-Total		0	Sub-Total		0	Sub-Total		0
Index Linear Feet Unit Score Index Linear Fee	DADT II I-day and I	Init Coore		DADT II Indonesia	I Unit Score		DADT II I-J-	v and Unit Soor		DADT II Index and	Unit Score		DADT II. Index. and I	Unit Score	
	FACT II - III DEX BIID C	J GLUIE		PANT II - IIIQEX BIII			FACT II - IIIde:	and one scole		FACT II - III dex and	o Goole		PART II - IIIdex and t	A.I. SCOLE	
0.570 8 4.5633333 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Index	Linear Feet	Unit Score	Index	Linear Feet Unit Score		Index	Linear Feet	Unit Score	Index	Linear Feet	Unit Score	Index	Linear Feet	Unit Score
	0.570	8	4.56333333	0	0 0		0	0	0	0	0	0	0	0	0

Ver. 10-20-17

#### FCI Calculator for the High-Gradient Headwater Streams in Appalachia

To ensure accurate calculations, the <u>UPPERMOST STRATUM</u> of the plant community is determined based on the calculated value for V<sub>CCANOPY</sub> (≥20% cover is required for tree/sapling strata). Go to the SAR Data Entry tab and enter site characteristics and data in the yellow cells. For information on determining how to split a project into SARs, see Chapter 5 of the Operational Draft Regional Guidebook for the Functional Assessment of High-Gradient Headwater Streams and Low-Gradient Perennial Streams in Appalachia (Environmental Laboratory U.S. Army Corps of Engineers 2017).

**Project Name:** MVP Stream Assessment **Location:** Wetzel County, Spread A

Sampling Date: 8-26-21 Project Site Before Project

**Subclass for this SAR:** 

Intermittent Stream

**Uppermost stratum present at this SAR:**SAR number: 3-A120 TEMP AR

Shrub/Herb Strata

Functional Results Summary: Enter Results in Section A of the Mitigation Sufficiency Calculator

Function	Functional Capacity Index
Hydrology	0.54
Biogeochemical Cycling	0.53
Habitat	0.35

#### Variable Measure and Subindex Summary:

Variable	Name	Average Measure	Subindex
V <sub>CCANOPY</sub>	Percent canpoy over channel.	Not Used, <20%	Not Used
$V_{EMBED}$	Average embeddedness of channel.	2.87	0.77
V <sub>SUBSTRATE</sub>	Median stream channel substrate particle size.	1.45	0.73
$V_{BERO}$	Total percent of eroded stream channel bank.	157.89	0.23
$V_{LWD}$	Number of down woody stems per 100 feet of stream.	0.00	0.00
$V_{TDBH}$	Average dbh of trees.	Not Used	Not Used
$V_{\sf SNAG}$	Number of snags per 100 feet of stream.	0.00	0.10
V <sub>SSD</sub>	Number of saplings and shrubs per 100 feet of stream.	105.26	1.00
V <sub>SRICH</sub>	Riparian vegetation species richness.	0.00	0.00
V <sub>DETRITUS</sub>	Average percent cover of leaves, sticks, etc.	1.88	0.02
$V_{HERB}$	Average percent cover of herbaceous vegetation.	66.88	0.89
V <sub>WLUSE</sub>	Weighted Average of Runoff Score for Catchment.	0.92	0.97

Version 10-20-17

			High-G		Headwat Data She				•	ia		n 10-20-1
-	Team:	BC DP						L	atitude/UTI	M Northing:	39.489914	
Pro	•	MVP Strea						Lo	-	_	-80.522135	5
		Wetzel Co							Sam	pling Date:	8-26-21	
	AR Number: Top Strata:	120 TEMP	Reach	Length (ft):	19	Stream Ty			nittent Strea			•
	and Timing:			i ala	(determine	d from perc	Before I			OPY)		•
		Distriction	e .			- 6	Deloie.	, roje.				
1	V <sub>CCANOPY</sub>	roughly eq less than 2	ercent cove uidistant po 0%, enter a	over chang ints along that t least one	nel by tree and stream. Value between point below	Measure or en 0 and 19	ly if tre	e/sap	oling cover	is at least 2		Not Used <20%
	5											
				6.11								
2	V <sub>EMBED</sub>	points alon of the surfa according a rating so	g the stream ace and are to the follow ore of 1. If	m. Select a a surroundii ring table. I the bed is c	particle from particle from ng the particle f the bed is composed of	n the bed. cle that is co an artificial bedrock, u	Before overed l surface se a rat	movi by fir e, or o ing s	ing it, deterne sediment composed core of 5.	mine the pe t, and enter of fine sedir	rcentage the rating nents, use	2.9
		Minshall 19	983)		cobble and l	poulder par	ticles (r	esca	led from Pl	atts, Megan	ian, and	
		Rating 5	Rating De		covered, su	rrounded o	r huriec	l by f	ine sedime	nt (or hedro	nck)	
		4			ace covered							
		3	26 to 50 pe	ercent of sur	face covere	ed, surround	led, or l	burie	d by fine se	ediment		
		<u>2</u>			face covered, s	•					icial	
	List the rat	ings at each					Danc	y	Jouill	(51 41411		ı
	1	2	3	3	3	2	5		4	1	2	
	5	1	3	5	3	1	3		3	3	4	
	5	5	3	4	1	2	2		3	1	3	
		cle size in ir	nches to the	nearest 0.	ame points I inch at eac irticles as 0.	ch point bel				counted as	99 in,	1.45 in
	7.50	1.50	1.20	3.20	0.80	0.60	2.40	0	4.80	0.50	7.00	
	0.40	0.30	1.00	0.20	1.80	12.00	1.40	_	4.80	0.30	0.40	
	8.20	0.40	0.50	1.20	7.60	3.60	2.00	0	1.70	3.00	1.40	
4	\ <u>'</u>	Total parag	nt of orodo	d atroom ob	annal bank	Enter the	total nu	mbo	r of foot of	aradad ban	k on ooob	
4	$V_{BERO}$		e total perd		annel bank be calculate							158 %
			Left Bank:	15	5 ft	F	Right Ba	ank:	15	5 ft		
mple 5	V <sub>LWD</sub>	Number of stream rea	down wood	y stems (at ne number f	least 4 inch	es in diame ire 50'-wide	ter and	36 i	nches in le	ngth) per 10		0.0
		amount pe	i ioo leel o	i Sireaiii Wiii	be calculat Number of	downed wo	ody ste	ms:	(	0		
6	$V_{TDBH}$				nly if V <sub>CCANO</sub> er tree DBH	<sub>PY</sub> tree/sapl	ing cov		at least 20º	%). Trees a	are at least	Not Use
										and the state		
1		List the dbl of the stream	am below:	nents of indi	vidual trees	(at least 4	in) with	in the				
				nents of indi	vidual trees	(at least 4	in) with	in the	e buffer on Right Side			
			am below:	nents of indi	vidual trees	(at least 4	in) with	in the				
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			am below:	nents of indi	vidual trees	(at least 4	in) with	in the				
7	V <sub>SNAG</sub>	of the stream	am below: Left Side	east 4" dbh	and 36" tall) the result of th	per 100 fe	et of str	ream	Right Side		gs on each	0.0
7	Vsnag	of the stream	am below: Left Side	east 4" dbh a mour	and 36" tall)	per 100 feet will be ca	et of str	ream.	Right Side		gs on each	0.0

9	V <sub>SRICH</sub>		the tallest	stratum. Ch and the sub	index will be	e calculate	d from these	data.			
		Grou	p 1 = 1.0					Grou	p 2 (-1.0)		•
	Acer rubru	m		Magnolia t	ripetala		Ailanthus a	Itissima		Lonicera ja	aponica
	Acer sacch	arum		Nyssa sylv	⁄atica		Albizia julib	rissin		Lonicera t	atarica
	Aesculus fl	ava		Oxydendrur	m arboreum		Alliaria peti	olata		Lotus corr	iculatus
	Asimina tril	oba		Prunus sei	rotina		Alternanthe	era		Lythrum s	alicaria
_	Betula alleg	nhaniensis		Quercus a	lba		philoxeroid		<u> </u>	Microstegiu	m vimineu
_	Betula lent			Quercus c			Aster tatari	cus		Paulownia	
	Carya alba			Quercus imbricaria			Cerastium			Polygonum	
	Carya glab	ra		Quercus prinus			Coronilla va			Pueraria n	nontana
	Carya oval	is		Quercus ru	ubra		Elaeagnus u	ımbellata	V	Rosa mult	iflora
	Carya ovat	a		Quercus v	elutina		Lespedeza	bicolor		Sorghum	halepense
	Cornus flor	rida		Sassafras	albidum		Lespedeza	cuneata		Verbena b	rasiliensis
	Fagus grar	ndifolia		Tilia ameri	cana		Ligustrum oi	btusifolium			
	Fraxinus ai	mericana		Tsuga can	adensis		Ligustrum s	sinense			
	Liriodendror			Ulmus ame			_iguoti um t				
			ш	Ollilus allie	encana						
	Magnolia a	cuminata									
		0	Species in	Group 1				2	Species	in Group 2	
		bplots sho Average pe	uld be place ercent cove are include.	r of leaves, Enter the p	y equidistar sticks, or ot	ntly along her organi	each side o c material. V etrital layer at	f the stre Voody de Leach su	<b>am.</b> oris <4" dia	ithin 25 feet meter and	1.88 %
				Side			Right		_		
		0	0	0	0	0	5	5	5		
44	V	A. ( a. m a. m a. m a.		avan af bank		estation (no	neasure only	f tunn non		) Do not	
11 V <sub>HERB</sub>		include wo	ody stems a tation perce at each sub	at least 4" d entages up oplot.	bh and 36"	all. Becau	se there may epted. Enter	be sever the perc	al layers of	ground	67 %
			Left	Side							
				_			Right	Side		_	
ampl	le Variable 1				95  f the stream re for waters		Right 45	65 65	90		0.92
		2 within th	e entire ca	tchment of Runoff Scor	f the stream	ı. hed:			Runoff	% in Catch-	0.92 Running Percen
	V <sub>WLUSE</sub>	2 within th	e entire ca Average of Land	tchment of Runoff Scor Use (Choos	f the stream	ı. hed:		65	Runoff Score	Catch- ment	Running Percen (not >100
	V <sub>WLUSE</sub>	2 within th	e entire ca Average of Land	tchment of Runoff Scor Use (Choos	f the stream	ı. hed:			Runoff Score	Catch-	Running Percen (not >100
	VwLuse Forest and n	2 within th	e entire ca Average of Land	tchment of Runoff Scor Use (Choos	f the stream	ı. hed:		65	Runoff Score	Catch- ment	Running Percen (not >100 91.99
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	VwLusE  Forest and n  Forest and n	2 within th Weighted /	e entire ca Average of Land >75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:		65	Runoff Score	Catch- ment 91.99	Running Percen (not >100 91.99
	VwLusE  Forest and n  Forest and n	2 within th Weighted A ative range (:	e entire ca Average of Land >75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:		65	Runoff Score	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
	VwLusE  Forest and n  Forest and n	2 within th Weighted A ative range (:	e entire ca Average of Land >75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:		65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
	VwLusE Forest and n	2 within th Weighted A ative range (:	e entire ca Average of Land >75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:		65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
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	Forest and n Forest and n Newly grade	2 within th Weighted A ative range (:	e entire ca Average of I Land -> 75% ground -> 75% ground -> 501, no vege	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:		65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
12	Forest and n Forest and n Newly grade	2 within th Weighted // ative range {: ative range {: d areas (bare	e entire ca Average of I Land -> 75% ground -> 75% ground -> 501, no vege	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
12 V	Forest and n Forest and n Newly grade S-A120	2 within th Weighted // ative range (: ative range (: d areas (bare	e entire ca Average of l Land >75% ground >75% ground soil, no vege	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
12 V	Forest and n Forest and n Newly grade S-A120 Variable	2 within th Weighted // ative range (: ative range (: d areas (bare  TEMP AR 1  Value  Not Used, <20%	e entire ca Average of I  Land  -75% ground -75% groun	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
12 V	Forest and n Forest and n Newly grade S-A120	2 within th Weighted // ative range (: ative range (: d areas (bare	e entire ca Average of I  Land  75% ground  75% ground  soil, no vege	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V ,	Forest and n Forest and n Newly grade S-A120 Variable	2 within th Weighted // ative range (: ative range (: d areas (bare  TEMP AR 1  Value  Not Used, <20%	e entire ca Average of I  Land  -75% ground -75% groun	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , ,	Forest and n Forest and n Newly grade  S-A120  Yariable  V_CCANOPY  V_EMBED  V_SUBSTRATE	2 within th Weighted /  ative range (: ative range (: d areas (bare  TEMP AR 1  Value Not Used, <20% 2.9	e entire ca Average of I  Land  >75% ground  soil, no vege  VSI  Not Used  0.77	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	Forest and n Forest and n Newly grade  S-A120  (ariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>BERO</sub>	2 within th Weighted / ative range {: ative range {: d areas (bare  Value  Not Used, <20%  2.9  1.45 in 158 %	e entire ca Average of I  Land  -75% ground -75% groun	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	Forest and n Forest and n Newly grade  S-A120  Yariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>BERO</sub> V <sub>LWD</sub>	2 within th Weighted /  ative range (: ative range (: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0	e entire ca Average of I  Land  -75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	Forest and n Forest and n Newly grade  S-A120  (ariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>BERO</sub>	2 within th Weighted / ative range {: ative range {: d areas (bare  Value  Not Used, <20%  2.9  1.45 in 158 %	e entire ca Average of I  Land  -75% ground -75% groun	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	Forest and n Forest and n Newly grade  S-A120  Yariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>BERO</sub> V <sub>LWD</sub>	2 within th Weighted /  ative range (: ative range (: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0	e entire ca Average of I  Land  -75% ground	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	Forest and n Forest and n Newly grade  S-A120  Variable  Vccanopy  Vsubstrate  Vbero  VLWD  Vtdbh	2 within th Weighted // ative range {: ative range {: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0 Not Used	e entire ca Average of I  Land	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percen (not >10 91.99 92.02
V	Forest and in Forest and in Forest and in Newly grade  Variable  Vccanopy  Vembed  Vsubstrate  Vbero  VLWD  Vtobh  Vsnag  Vssb	2 within th Weighted /  ative range (: ative range (: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0 Not Used 0.0 105.3	VSI Not Used 0.10 1.00	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V , , , , , , , , , , , , , , , , , , ,	S-A120  S-A120  Yariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>LWD</sub> V <sub>TDBH</sub> V <sub>SNAG</sub> V <sub>SSD</sub> V <sub>SRICH</sub>	2 within th Weighted /  ative range (: ative range (: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0 Not Used 0.0 105.3 0.00	e entire ca Average of I  Land  75% ground  75% ground  Soil, no vege  VSI  Not Used  0.77  0.73  0.23  0.00  Not Used  0.10  1.00  0.00	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V V	Forest and n Forest and n Forest and n Newly grade  Variable  Vccanopy  VEMBED  VSUBSTRATE  VBERO  VLWD  VTDBH  VSNAG  VSSD  VSRICH  VDETRITUS	2 within th Weighted / weighted / ative range (: d areas (bare  TEMP AR 1 Value Not Used, <20% 2.9 1.45 in 158 % 0.0 Not Used 0.0 105.3 0.00 1.9 %	VSI Not Used 0.10 0.00 0.00 0.00 0.00	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Runnin Percer (not >10 91.99
V V	S-A120  S-A120  Yariable  V <sub>CCANOPY</sub> V <sub>EMBED</sub> V <sub>SUBSTRATE</sub> V <sub>LWD</sub> V <sub>TDBH</sub> V <sub>SNAG</sub> V <sub>SSD</sub> V <sub>SRICH</sub>	2 within th Weighted /  ative range (: ative range (: d areas (bare  Value Not Used, <20% 2.9 1.45 in 158 % 0.0 Not Used 0.0 105.3 0.00	e entire ca Average of I  Land  75% ground  75% ground  Soil, no vege  VSI  Not Used  0.77  0.73  0.23  0.00  Not Used  0.10  1.00  0.00	tchment of Runoff Scor Use (Choos i cover)	f the stream re for waters se From Dro	ı. hed:	45	65	Runoff Score 1 1 0	Catch- ment 91.99 0.03	Running Percen (not >100 91.99

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET (FRONT)

STREAM NAME		LOCATION	
STATION#R	RIVERMILE	STREAM CLASS	
LAT LO	ONG	RIVER BASIN	
STORET#		AGENCY	
INVESTIGATORS	•		
FORM COMPLETED BY		DATE TIME	REASON FOR SURVEY

WEATHER CONDITIONS  SITE LOCATION/MAP	Now Past 24 hours Yes No  storm (heavy rain) rain (steady rain) showers (intermittent) % cloud cover clear/sunny Other  Draw a map of the site and indicate the areas sampled (or attach a photograph)  Has there been a heavy rain in the last 7 days?  Yes No  Air Temperature ° C  Other
	Timber Mat
	S-A120 TEMP AR 1
STREAM CHARACTERIZATION	Stream Subsystem Perennial Intermittent Tidal Stream Type Coldwater Warmwater  Stream Origin Glacial Spring-fed Non-glacial montane Swamp and bog Other

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET (BACK)

WATERS FEATURI		Fores Field Agric	Pasture Industria	rcial	No evidence Sor Obvious sources Local Watershed Erosi None Moderate	ne potential sources
RIPARIA VEGETA (18 meter	ΓION	Trees	e the dominant type and Sl ant species present	hrubs	Grasses He	brbaceous
INSTREA FEATURI		Estimat Samplin Area in Estimat	red Stream Depthm	m m² km² m	Canopy Cover Partly open Part  High Water Mark  Proportion of Reach R  Morphology Types Riffle Pool 9  Channelized Yes  Dam Present Yes	epresented by Stream Run% No
LARGE V DEBRIS	VOODY		m² of LWDm	1 <sup>2</sup> /km <sup>2</sup> ( <b>LWD</b> / 1	reach area)	
AQUATIO VEGETA		Domina			minant species present nt Rooted floating	Ü
WATER ((DS, US)	QUALITY	Specific Dissolve pH Turbidi	rature0 C Conductance ed Oxygen ty trument Used		Water Odors Normal/None Sewage Petroleum Fishy  Water Surface Oils Slick Sheen None Other  Turbidity (if not measu Clear ☐ Slightly tu Opaque Stained	Chemical Other Globs Flecks
SEDIMEN SUBSTRA		Odors Norm Chen Other Oils Abser	al Sewage nical Anaerobic 		are the undersides blac	th are not deeply embedded,
INC	ORGANIC SUBS (should a		COMPONENTS 00%)		ORGANIC SUBSTRATE C (does not necessarily add	
Substrate Type	Diamet	er	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder Cobble	> 256 mm (10") 64-256 mm (2.5			Muck-Mud	black very fine ergenie	
Gravel	2-64 mm (0.1"-2			IVIUCK-IVIUU	black, very fine organic (FPOM)	

Sand

Silt

Clay

0.06-2mm (gritty)

< 0.004 mm (slick)

0.004-0.06 mm

grey, shell fragments

Marl

#### HABITAT ASSESSMENT FIELD DATA SHEET - HG - USE ON ALL STREAMS (FRONT)

STREAM NAME	LOCATION	
STATION # RIVERMILE	STREAM CLASS	
LAT LONG	RIVER BASIN	
STORET#	AGENCY	
INVESTIGATORS		
FORM COMPLETED BY	DATE AM PM	REASON FOR SURVEY

	Habitat		Condition	ı Category	
	Parameter	Optimal	Suboptimal	Marginal	Poor
	1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
n sampling reach	2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25- 50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50- 75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
ted in	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
Parameters to be evaluated in sampling reach	3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep).
ıram	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
Pa	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

#### HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

	Habitat		Condition	n Category			
	Parameter	Optimal	Suboptimal	Marginal	Poor		
	6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.		
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
oling reach	7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.		
samp	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
Parameters to be evaluated broader than sampling reach	8. Bank Stability (score each bank)  Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.		
e eva	SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0		
to be	SCORE (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0		
Parameters	9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one- half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.		
	SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0		
	SCORE (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0		
	10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6- 12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.		
	SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0		
ĺ	SCORE (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0		

Total	Caare	
i otai	Score	

#### BENTHIC MACROINVERTEBRATE FIELD DATA SHEET

STREAM NAME		LOCATION						
STATION #	_ RIVERMILE	STREAM CLASS						
LAT	LONG	RIVER BASIN						
STORET#		AGENCY						
INVESTIGATORS			LOT NUMBER					
FORM COMPLETED	ВҮ	DATE REASON FOR SURVEY TIME						
HABITAT TYPES	Indicate the percentage of	each habitat type present	onks % Sand %					

HABITAT TYPES	Indicate the percentage of each habitat type present  Cobble% Snags% Vegetated Banks% Sand%  Submerged Macrophytes% Other ( )%
SAMPLE COLLECTION	Gear used D-frame kick-net Other
	How were the samples collected? wading from bank from boat
	Indicate the number of jabs/kicks taken in each habitat type.  Cobble Snags Vegetated Banks Sand Submerged Macrophytes Other ( )
GENERAL COMMENTS	

#### QUALITATIVE LISTING OF AQUATIC BIOTA

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare, 2 = Common, 3= Abundant, 4 = Dominant

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4

#### FIELD OBSERVATIONS OF MACROBENTHOS

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare (1-3 organisms), 2 = Common (3-9 organisms), 3 = Abundant (>10 organisms), 4 = Dominant (>50 organisms)

Porifera	0	1	2	3	4	Anisoptera	0	1	2	3	4	Chironomidae	0	1	2	3	4
Hydrozoa	0	1	2	3	4	Zygoptera	0	1	2	3	4	Ephemeroptera	0	1	2	3	4
Platyhelminthes	0	1	2	3	4	Hemiptera	0	1	2	3	4	Trichoptera	0	1	2	3	4
Turbellaria	0	1	2	3	4	Coleoptera	0	1	2	3	4	Other	0	1	2	3	4
Hirudinea	0	1	2	3	4	Lepidoptera	0	1	2	3	4						
Oligochaeta	0	1	2	3	4	Sialidae	0	1	2	3	4						
Isopoda	0	1	2	3	4	Corydalidae	0	1	2	3	4						
Amphipoda	0	1	2	3	4	Tipulidae	0	1	2	3	4						
Decapoda	0	1	2	3	4	Empididae	0	1	2	3	4						
Gastropoda	0	1	2	3	4	Simuliidae	0	1	2	3	4						
Bivalvia	0	1	2	3	4	Tabinidae	0	1	2	3	4						
						Culcidae	0	1	2	3	4						

#### WOLMAN PEBBLE COUNT FORM

County: Wetzel Stream ID: S-A120 TEMP AR

Stream Name: STOUT RUN TEMP AR 1

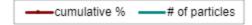
HUC Code: 05030201 Basin: Little Muskingum-Middle Island

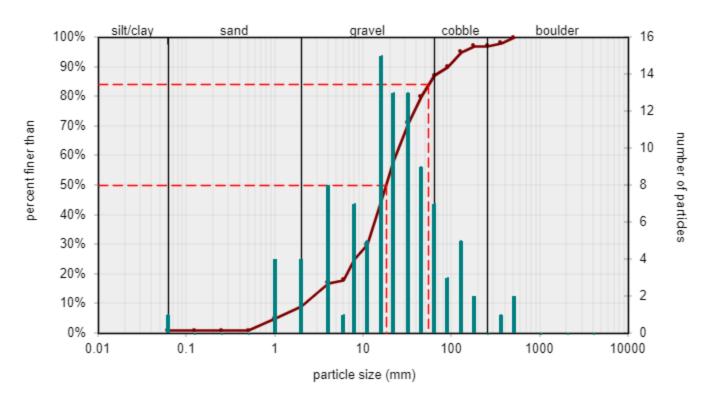
Survey Date: 8/26/2021
Surveyors: DP, BC

Type: Bankfull Channel

Y 1	D + DTIGI E		LE COUNT	I D .: 1	7D + 1 #	T. A.	0/ 0
Inches	PARTICLE	Millimeters		Particle Count	Total #	Item %	% Cum
	Silt/Clay	< .062	S/C	<b>*</b>	1	1.00	1.00
	Very Fine	.062125		•	0	0.00	1.00
	Fine	.12525	1	<b>^</b>	0	0.00	1.00
	Medium	.255	SAND	<b>^</b>	0	0.00	1.00
	Coarse	.50-1.0	1	<b>A</b>	4	4.00	5.00
.0408	Very Coarse	1.0-2	1	<b>*</b>	4	4.00	9.00
.0816	Very Fine	2 -4		<b>*</b>	8	8.00	17.00
.1622	Fine	4 -5.7	1	<b>^</b>	1	1.00	18.00
.2231	Fine	5.7 - 8	1	<b>^</b>	7	7.00	25.00
.3144	Medium	8 -11.3	1	<b>^</b>	5	5.00	30.00
.4463	Medium	11.3 - 16	GRAVEL	<b>^</b>	15	15.00	45.00
.6389	Coarse	16 -22.6	1	<b>^</b>	13	13.00	58.00
.89 - 1.26	Coarse	22.6 - 32	1	<b>^</b>	13	13.00	71.00
1.26 - 1.77	Vry Coarse	32 - 45	1	<b>^</b>	9	9.00	80.00
1.77 -2.5	Vry Coarse	45 - 64	1	<b>^</b>	7	7.00	87.00
2.5 - 3.5	Small	64 - 90		<b>^</b>	3	3.00	90.00
3.5 - 5.0	Small	90 - 128		<b>A</b>	5	5.00	95.00
5.0 - 7.1	Large	128 - 180	- COBBLE	<b>^</b>	2	2.00	97.00
7.1 - 10.1	Large	180 - 256	1	<b>A</b>	0	0.00	97.00
10.1 - 14.3	Small	256 - 362		<b>A</b>	1	1.00	98.00
14.3 - 20	Small	362 - 512	1	<b>^</b>	2	2.00	100.00
20 - 40	Medium	512 - 1024	BOULDER	<b>A</b>	0	0.00	100.00
40 - 80	Large	1024 -2048	1	<b>A</b>	0	0.00	100.00
80 - 160	Vry Large	2048 -4096	1	<u> </u>	0	0.00	100.00
	Bedrock		BDRK	<u> </u>	0	0.00	100.00
			†	Totals:	100		
	Total Tally:		-			-	-

#### Bankfull Channel Pebble Count, S-A120 TEMP AR 1 Stout Run TEMP AR 1

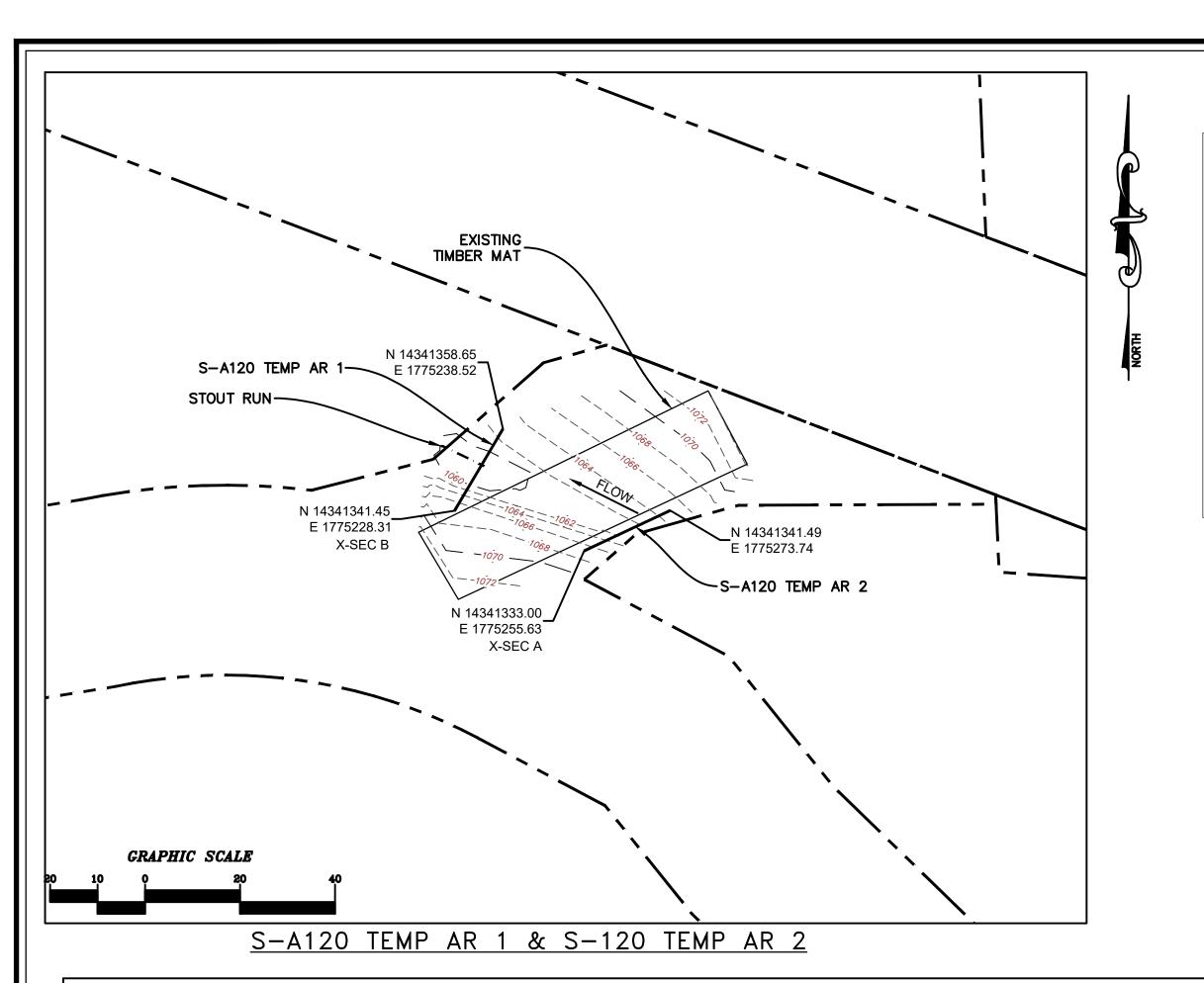




Size (mm)					
D16	3.7				
D35	12				
D50	18				
D65	27				
D84	55				
D95	130				

Size Distribution				
mean	14.3			
dispersion	4.0			
skewness	-0.09			

	Гуре	
silt/clay	1%	
sand	8%	
gravel	78%	
cobble	10%	
boulder	3%	



# S-A120 TEMP AR 1 & S-120 TEMP AR 2 BASELINE THALWEG - 1056 1054 0+10 0+00 DISTANCE ALONG CROSS-SECTION (FT) PROFILE LEGEND PROFILE H: 1"=10' EXISTING STREAM PROFILE V: 1"=5' INVERT ALONG THALWEG

AS-BUILT TABLE: S-A120 TEMP AR 1 CROSS SECTION B

ELEV

AŞ-BUILT

DIFF.

VERT.

DIFF.

PRE-CROSSING

14341343.86 1775229.75 1065.47

14341351.10 | 1775234.04 | 1059.05

BS-L 14341347.13 1775231.68 1059.64

BS-R 14341353.59 1775235.52 1059.13

TS-R 14341354.23 1775235.89 1061.07

PT. LOC. | NORTHING | EASTING

TYPICAL 5-POINT CROSS-SECTION (FACING DOWNSTREAM)

TS: TOP OF SLOPE

BS: BOTTOM OF SLOPE

THW: THALWEG (INVERT

#### SURVEY NOTES:

LEGEND

STUDY AREA (EASEMENT)

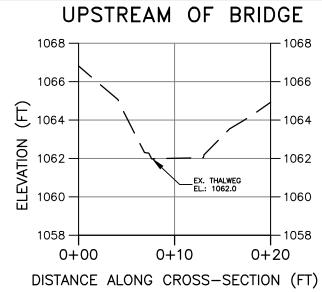
1176.87 +

EXISTING SURVEY-LOCATED THALWEG

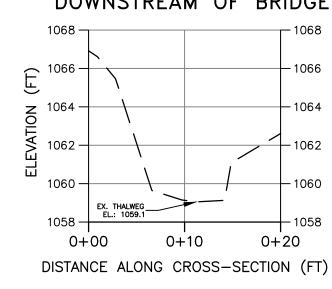
EXISTING SURVEYED GROUND SHOT ELEVATION

- 1. THIS MAP HAS BEEN ORIENTED TO NAD 1983 UTM ZONE 17N, AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), USING REAL TIME DGPS. FIELD LOCATIONS WERE COMPLETED ON AUGUST 26, 2021.
- 2. EASEMENT LINES SHOWN ON PLAN VIEW WERE PROVIDED BY MOUNTAIN VALLEY
- 3. SURVEY POINTS FOR CROSS SECTIONS AND THALWEG PROFILES COLLECTED IN 2021 HAVE BEEN USED IN COMBINATION WITH SURVEY POINTS COLLECTED PREVIOUSLY IN 2020 IN ORDER TO GENERATE THE PRE-CROSSING SURFACE SHOWN IN PLAN. DUE TO NATURAL EROSIONAL STREAM PROCESSES THAT CAN OCCUR OVER TIME, MINOR ADJUSTMENTS TO THE PROFILE ALIGNMENTS MAY HAVE BEEN REQUIRED IN ORDER TO GENERATE A CLEAN PRE-CROSSING SURFACE.
- 4. ALL SECTION VIEWS SHOWN LEFT TO RIGHT FACING DOWNSTREAM.
- 5. POST-CROSSING SURVEY INFORMATION SHOWN IN RED. DATA PENDING.
- 6. POST-CROSSING SURVEY POINTS FOR CROSS SECTIONS AND THALWEG ARE PROJECTED ONTO PRE-CROSSING SECTION AND PROFILE VIEWS FOR COMPARISON.

## S-A120 TEMP AR 2 BASELINE CROSS-SECTION A



### S-A120 TEMP AR 1 BASELINE CROSS-SECTION B DOWNSTREAM OF BRIDGE



CROSS SECTION LEGEND — EXISTING GRADE

CROSS SECTION

H: 1"=10'

V: 1"=5'

NOTE: ALL SECTIONS VIEWS SHOWN LEFT TO RIGHT FACING DOWNSTREAM.

PRE-CROSSING PHOTOS



PHOTO TAKEN LOOKING DOWNSTREAM FROM UPSTREAM IMPACT LIMITS



DOWNSTREAM IMPACT LIMITS

POST-CROSSING PHOTOS

PENDING CROSSING

PHOTO TAKEN LOOKING DOWNSTREAM FROM UPSTREAM IMPACT LIMITS

PENDING CROSSING

PHOTO TAKEN LOOKING UPSTREAM FROM DOWNSTREAM IMPACT LIMITS

PRE-CROSSING

CAD File No.

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Drawing No