



**S-SRC-30 overview, facing upstream.**



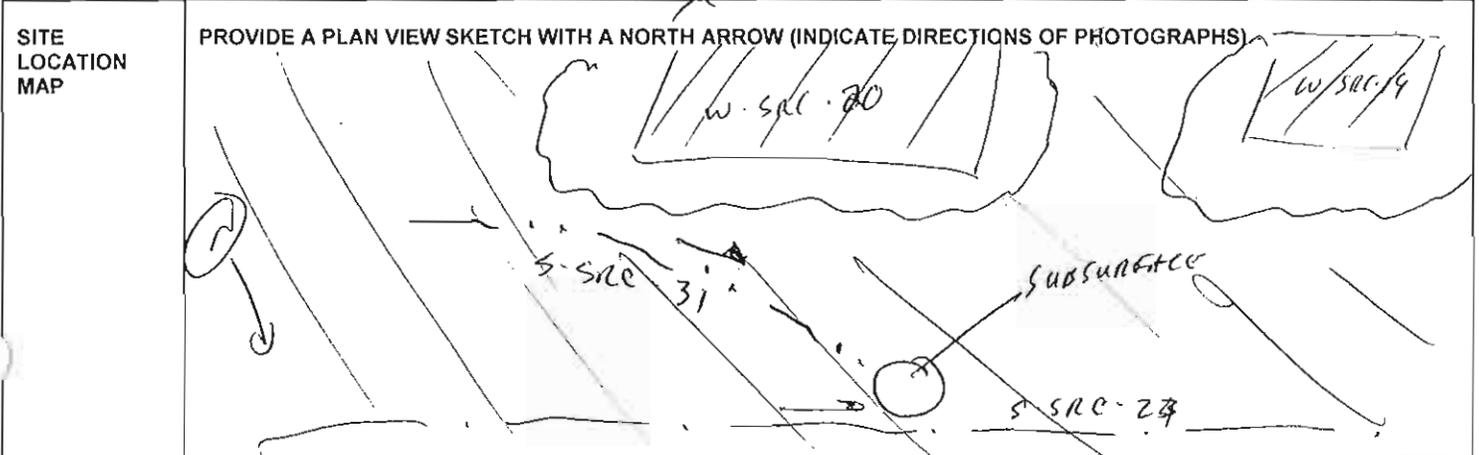
**S-SRC-30 overview, facing downstream.**

**STREAM S-SRC-31**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-31			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC PLM JAC	DATE	06.04.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	1305	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	STONYCREEK RIVER	
STATION #		RIVERMILE		STORET #		

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>		
		% CLOUD COVER		AIR TEMPERATURE	75 °F
				OTHER	



<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>2.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>1.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>0.25</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td>0.15</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td>Ø</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	0.50	FT.	VERTICAL (B)	0.50	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.	VERTICAL (D)	0.50	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	2.00	FT.	BOTTOM WIDTH (F)	1.00	FT.	OVERALL DEPTH (G)	0.50	FT.	ORDINARY HIGH WATER MARK (H)	0.25	FT.	FLOW DEPTH (I)	0.15	FT.	APPROX. SURFACE VELOCITY	Ø	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		0.50	FT.																														
	VERTICAL (B)	0.50	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.																															
	VERTICAL (D)	0.50	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	2.00	FT.																															
	BOTTOM WIDTH (F)	1.00	FT.																															
	OVERALL DEPTH (G)	0.50	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.25	FT.																															
	FLOW DEPTH (I)	0.15	FT.																															
	APPROX. SURFACE VELOCITY	Ø	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	STONYCREEK RIVER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-520.31

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>			<b>LOCAL WATERSHED NPS POLLUTION</b>		
	<input checked="" type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> NO EVIDENCE	<input type="checkbox"/> SOME POTENTIAL SOURCES		
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES			
	<input type="checkbox"/> AGRICULTURAL	<input type="checkbox"/> OTHER	<b>LOCAL WATERSHED EROSION</b>			
	<input type="checkbox"/> RESIDENTIAL		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> MODERATE	<input type="checkbox"/> HEAVY	
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input checked="" type="checkbox"/> TREES	<input type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input checked="" type="checkbox"/> HERBACEOUS		
	DOMINANT SPECIES PRESENT? <i>RED MAPLE, SWEET BIRCH, ALGAE SP.</i>					
<b>INSTREAM FEATURES</b>	STUDY LENGTH	<i>150</i>	FT.	<b>CANOPY COVER</b>		
	STREAM WIDTH	<i>2.00</i>	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN	<input type="checkbox"/> PARTLY SHADED
	STUDY REACH AREA	<i>-</i>	AC.	<input checked="" type="checkbox"/> SHADED		
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>		
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> RUN	<input type="checkbox"/> POOL
TAXA PRESENT	<i>-</i>			<input type="checkbox"/> CHANNELIZED	<input type="checkbox"/> DAM PRESENT	<input type="checkbox"/> YES
<b>LARGE WOODY DEBRIS</b>	LWD	<i>-</i>	FT. <sup>2</sup>			
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>			
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input type="checkbox"/> ROOTED EMERGENT	<input type="checkbox"/> ROOTED SUBMERGENT	<input type="checkbox"/> ROOTED FLOATING			
	<input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> FREE FLOATING			
	DOMINANT SPECIES PRESENT					
	PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %					
<b>WATER QUALITY</b>	TEMPERATURE	<i>-</i>	°C	<b>WATER ODORS</b>		
	SPEC. CONDUCTANCE	<i>-</i>		<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> CHEMICAL
	DISSOLVED OXYGEN	<i>-</i>		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	pH	<i>-</i>		<b>WATER SURFACE OILS</b>		
	TURBIDITY	<i>-</i>		<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily	<input type="checkbox"/> FLECKS
	WQ INSTRUMENT USED			<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER	
				<b>TURBIDITY (IF NOT MEASURED)</b>		
				<input checked="" type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID	<input type="checkbox"/> TURBID
<b>SEDIMENT/SUBSTRATE</b>	<b>ODORS</b>			<b>DEPOSITS</b>		
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST		
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND		
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS			
	<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER			
	<b>OILS</b>			<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>		
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
	<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE				

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>40</i>
BOULDER	256 MM (10"+)	-	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
COBBLE	64 - 256 MM (2.5 - 10")	-			
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>15</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>	MARL	GREY, SHELL FRAGMENTS	-
SILT	0.004 - 0.06 MM	<i>45</i>			
CLAY	<0.004 MM (SLICK)	<i>30</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
AA17	PIC ALLEGHENY TRUNK			06.08.12		
Name(s) of Evaluator(s)		Stream Name and Information				
S.R.C., D.L.M., J.R.G.		S.S.R.C.31 UNT TO STONEY CREEK RIVER				

**1. RIPARIAN VEGETATION:** Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory		Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).		High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.			Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.		High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.		Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.						
Scores	20	19	18	17	16	High	Low	High	Low	High	Low	High	Low							
						15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along the floodplain using the descriptors above.

2. Estimate the % area within each condition category. Calculators are provided for you below.

3. Enter the % Riparian Area and Score for each category in the blocks below. Ensure the sums of % Riparian Blocks equal 100

Right Side	% Riparian Area>	Score >								100%	
	1.00	8								100%	B
CI = Sum (Rt and Lt sub-Indexes)/2											
Left Side	% Riparian Area>	Score >								100%	CI
	1.00	8								100%	0.40
Lt Sub-Index> 0.40											

**2. RIPARIAN ZONE OF INFLUENCE:** Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory		Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).		High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.			Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.		High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.		Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.						
Score	20	19	18	17	16	High	Low	High	Low	High	Low	High	Low							
						15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.

2. Estimate the % area within each condition category. Calculators are provided for you below.

3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below. Ensure the sums of % Riparian ZOI Blocks equal 100

Right Side	% Riparian Area>	Score >								100%	
	1.00	8								100%	B
CI = Sum (Rt and Lt sub-Indexes)/2											
Left Side	% Riparian Area>	Score >								0%	CI
	0.90	7	0.10							0%	6.40
Lt Sub-Index> 6.40											

**Comments:**

ZOI IS PRIMARILY CLEAR-CUT W/ ~15 YRS. OF SUCCESSION.

RIPARIAN ECOTONE CONDITION INDEX	RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.	THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2
	0.40



**S-SRC-31 overview, facing upstream.**



**S-SRC-31 overview, facing downstream.**

**STREAM S-SRC-32**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S.SRC.32		CLIENT	PTC
STREAM CLASS		INTERMITTENT		PROJECT	Allegheny Tunnel
INVESTIGATORS	SAC DLM JCB	DATE	06.06.12	LOCATION	Somerset County, PA
		TIME	1320		
LATITUDE		LONGITUDE		RIVER BASIN	STONY CREEK RIVER
STATION #	-	RIVERMILE	-	STORET #	-

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO  AIR TEMPERATURE <span style="border: 1px solid black; padding: 2px;">75</span> °F  OTHER <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	% CLOUD COVER	<span style="border: 1px solid black; padding: 2px;">0</span>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	CLEAR/SUNNY		<input checked="" type="checkbox"/>		

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.  <b>CHANNEL TOP WIDTH (E)</b>  CHANNEL DEPTH (G) FLOW DEPTH (I) BOTTOM WIDTH (F) ORDINARY HIGH WATER MARK (H)	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.
			VERTICAL (B)	0.50
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.
		VERTICAL (D)	0.50	FT.
CHANNEL DIMENSIONS		TOP WIDTH (E)	3.00	FT.
		BOTTOM WIDTH (F)	1.00	FT.
		OVERALL DEPTH (G)	0.50	FT.
		ORDINARY HIGH WATER MARK (H)	0.25	FT.
		FLOW DEPTH (I)	Ø	FT.
		APPROX. SURFACE VELOCITY	Ø	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA <span style="border: 1px solid black; display: inline-block; width: 50px; height: 15px;"></span> SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	STONY CREEK RIVER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SAC-32

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS	DOMINANT SPECIES PRESENT? <u>WHITE OAK, WITCH HAZEL</u>		
INSTREAM FEATURES	STUDY LENGTH	<u>~300</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>3.0</u> FT.	<input type="checkbox"/> OPEN	<input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	<u>-</u> AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	<u>-</u> SQ. MI.	<input type="checkbox"/> RIFFLE <input type="checkbox"/> RUN <input type="checkbox"/> POOL <input type="checkbox"/> CHANNELIZED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
LARGE WOODY DEBRIS	LWD	<u>-</u>	FT. <sup>2</sup>	
	DENSITY OF LWD	<u>-</u>	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FREE FLOATING	
WATER QUALITY	DOMINANT SPECIES PRESENT			
	PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
	TEMPERATURE	<u>-</u> °C	WATER ODORS	
	SPEC. CONDUCTANCE	<u>-</u>	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	<u>-</u>	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	<u>-</u>	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
SEDIMENT/SUBSTRATE	WATER SURFACE OILS			
	<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily			
	<input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS			
	<input type="checkbox"/> NONE <input type="checkbox"/> OTHER			
TURBIDITY (IF NOT MEASURED)				
<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				
ODORS		DEPOSITS		
<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input checked="" type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST	
<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND	
<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS		
<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER		
OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE			

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	40
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	10	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	20			
SAND	0.06 - 0.2 MM (GRITTY)	10			
SILT	0.004 - 0.06 MM	30	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	30			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY TUNNEL			06.08.12	S-SRC-32	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, DLM, JRG	S-SRC-32 UNIT TO SPRAWY CREEK REVD

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

1. Identify Condition Category areas along the floodplain using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian Area and Score for each category in the blocks below. <span style="float: right;">Ensure the sums of % Riparian Blocks equal 100</span>										
Right Side	% Riparian Area>	1.00							100%	
	Score >	8							8	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	1.00							100%	Rt Sub-Index> 0.40 0.00
	Score >	8							8	Lt Sub-Index> 0.40 0.00
CI										

0.40

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below. <span style="float: right;">Ensure the sums of % Riparian ZOI Blocks equal 100</span>										
Right Side	% Riparian Area>	1.00							100%	
	Score >	8							8	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	1.00							100%	Rt Sub-Index> 0.40 0.00
	Score >	8							8	Lt Sub-Index> 0.40 0.00
CI										

0.40

Comments:  
ZOI IS CLEAR-CUT W/ ~15 YRS. OF SUCCESSION.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.40
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2		0.40

0.40



**S-SRC-32 overview, facing upstream.**



**S-SRC-32 overview, facing downstream.**

**STREAM S-SRC-33**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S.SRC-33	CLIENT	PTC
STREAM CLASS	PERENNIAL	PROJECT	Allegheny Tunnel
INVESTIGATORS	SRC KLO	DATE	07.03.12 MM/DD/YR
		TIME	1450 24 HOUR (I.E. 16:45)
LATITUDE		LOCATION	Somerset County, PA
STATION #	-	RIVER BASIN	STONY CREEK RIVER
		STORET #	-

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>	AIR TEMPERATURE <span style="border: 1px solid black; padding: 2px;">85</span> °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>	OTHER	
	<input checked="" type="checkbox"/>	% CLOUD COVER <span style="border: 1px solid black; padding: 2px;">100</span>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>			

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td style="text-align: center;">3.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td style="text-align: center;">2.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td style="text-align: center;">0.75</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td style="text-align: center;">0.33</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td style="text-align: center;">&lt; 5.0</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.	VERTICAL (B)	1.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.	VERTICAL (D)	1.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	3.00	FT.	BOTTOM WIDTH (F)	2.00	FT.	OVERALL DEPTH (G)	1.00	FT.	ORDINARY HIGH WATER MARK (H)	0.75	FT.	FLOW DEPTH (I)	0.33	FT.	APPROX. SURFACE VELOCITY	< 5.0	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		1.00	FT.																														
	VERTICAL (B)	1.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.																															
	VERTICAL (D)	1.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	3.00	FT.																															
	BOTTOM WIDTH (F)	2.00	FT.																															
	OVERALL DEPTH (G)	1.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.75	FT.																															
	FLOW DEPTH (I)	0.33	FT.																															
	APPROX. SURFACE VELOCITY	< 5.0	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA <span style="border: 1px solid black; padding: 2px;"> </span> SQ. MI.	
STREAM ORIGIN		OTHER		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/> SPRING FED <input checked="" type="checkbox"/> MIXTURE OF ORIGINS <input checked="" type="checkbox"/> OTHER <span style="border: 1px solid black; padding: 2px;">STONY CREEK</span>		
<input type="checkbox"/>	NON-GLACIAL MONTANE			
<input type="checkbox"/>	SWAMP AND BOG			

STREAM ID: S.SAC.33

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES <b>LOCAL WATERSHED EROSION</b> <input type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>B1. CHERRY, SASSAPILLA, WETCH HAZEL, MTN. LAUREL</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>3.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	<i>~</i> AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	<i>~</i> SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>80</i> %	<input type="checkbox"/> RUN <i>0</i> %
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> POOL <i>20</i> %		
TAXA PRESENT	<i>(ADDS, SPONGELY)</i>		CHANNELIZED DAM PRESENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	<i>~</i>	FT. <sup>2</sup>	
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FREE FLOATING	
WATER QUALITY	DOMINANT SPECIES PRESENT			
	PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
	TEMPERATURE	_____ °C	WATER ODORS	
	SPEC. CONDUCTANCE	_____	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
DISSOLVED OXYGEN	_____	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	
pH	_____	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER	
TURBIDITY	_____	WATER SURFACE OILS		
WQ INSTRUMENT USED	<i>(Circled and crossed out)</i>		<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily	
		<input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS	<input type="checkbox"/> OTHER	
		<input checked="" type="checkbox"/> NONE	TURBIDITY (IF NOT MEASURED)	
		<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	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE	<input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST	<input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND
	<input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL	<input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> RELICT SHELLS	<input type="checkbox"/> OTHER
OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT	<input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>~</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~75</i>
BOULDER	256 MM (10"+)	<i>-</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>20</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>30</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>25</i>			
SILT	0.004 - 0.06 MM	<i>25</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
CLAY	<0.004 MM (SLICK)	<i>-</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0  
For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A11J	PIT ALLEGHENY TUNNIEZ			07.08.12	S.S.R.C.33	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KLE	S.S.R.C.33 UNTD STONEY CREEK RIVER

**1. RIPARIAN VEGETATION:** Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

Right Side	% Riparian Area >	1.00							100.0%	
	Score >	16							16	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area >	1.00							100.0%	Rt Sub-Index > 0.00000
	Score >	16							16	Lt Sub-Index > 0.00000
CI										0.00

0.00

**2. RIPARIAN ZONE OF INFLUENCE:** Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

Right Side	% Riparian Area >	1.00							100.0%	
	Score >	17							17	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area >	1.00							100.0%	Rt Sub-Index > 0.00000
	Score >	17							17	Lt Sub-Index > 0.00000
CI										0.00

0.00

Comments:

ZOI IS UPLAND, DIVERDIOUS WOODSST CONSISTING OF MATURE TREES W/ > 0.5' DBH.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.00
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2		0.00

0.00



**S-SRC-33 overview, facing upstream.**



**S-SRC-33 overview, facing downstream.**

**STREAM S-SRC-34**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S SRC 34		CLIENT		PTC	
STREAM CLASS		PERENNIAL		PROJECT		Allegheny Tunnel	
INVESTIGATORS		DATE		MM/DD/YR		LOCATION	
		TIME		24 HOUR (I.E. 16:45)			
LATITUDE		LONGITUDE		RIVER BASIN		STONY CREEK RIVER	
STATION #		RIVERMILE		STORET #			

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
	<input type="checkbox"/>	STORM (HEAVY RAIN) RAIN (STEADY RAIN)		<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	0	%	0	%	CLOUD COVER	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>			
				AIR TEMPERATURE	80	°F	
				OTHER			

SITE LOCATION MAP

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)		HORIZONTAL (A)	3.00	FT.
CHANNEL TOP WIDTH (E)		LEFT BANK (FACE DOWNSTREAM)		VERTICAL (B)	1.00	FT.
				HORIZONTAL (C)	3.00	FT.
CHANNEL DEPTH (G)		ORDINARY HIGH WATER MARK (H)		VERTICAL (D)	1.00	FT.
				TOP WIDTH (E)	3.50	FT.
FLOW DEPTH (I)		BOTTOM WIDTH (F)		BOTTOM WIDTH (F)	3.00	FT.
				OVERALL DEPTH (G)	0.75	FT.
CHANNEL DEPTH (G)		ORDINARY HIGH WATER MARK (H)		ORDINARY HIGH WATER MARK (H)	0.50	FT.
				FLOW DEPTH (I)	0.15	FT.
CHANNEL DEPTH (G)		ORDINARY HIGH WATER MARK (H)		APPROX. SURFACE VELOCITY	25	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
STREAM ORIGIN		OTHER		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/>	SPRING FED	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input checked="" type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input checked="" type="checkbox"/>	OTHER	

STONY CREEK RIVER

STREAM ID: S.SAC.34

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

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"/> OTHER <input type="checkbox"/> RESIDENTIAL		LOCAL WATERSHED NPS POLLUTION <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES	
	LOCAL WATERSHED EROSION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY			
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <u>SWEET BIRCH, SASAPRAS</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>300</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>3.80</u> FT.	<input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STUDY REACH AREA	- AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES <input checked="" type="checkbox"/> RIFFLE <u>40</u> % <input type="checkbox"/> RUN    _____ % <input checked="" type="checkbox"/> POOL <u>60</u> %	
	EST. DRAINAGE AREA	- SQ. MI.	<input checked="" type="checkbox"/> CHANNELIZED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> DAM PRESENT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	TAXA PRESENT <u>CRAYFISH, MUDGON</u>		
LARGE WOODY DEBRIS	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
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"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT _____ PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
WATER QUALITY	TEMPERATURE	_____ °C	WATER ODORS	
	SPEC. CONDUCTANCE	_____	<input checked="" type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE	
	DISSOLVED OXYGEN	_____	<input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL	
	pH	_____	<input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
TURBIDITY	_____	WATER SURFACE OILS		
		<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily		
		<input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS		
		<input checked="" type="checkbox"/> NONE <input type="checkbox"/> OTHER		
	WQ INSTRUMENT USED _____	TURBIDITY (IF NOT MEASURED)		
		<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		
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE	<input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST	
	<input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL	<input type="checkbox"/> OTHER	<input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND	
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT	<input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<u>33</u>
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	-			
GRAVEL	2 - 64 MM (0.1 - 2.5")	<u>30</u>			
SAND	0.06 - 0.2 MM (GRITTY)	<u>20</u>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
SILT	0.004 - 0.06 MM	<u>50</u>			
CLAY	<0.004 MM (SLICK)	<u>✓</u>			
			MARL	GREY, SHELL FRAGMENTS	-

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A117	PTC ALLEGANY TUNNEL			02.09.12	S.SRC.34	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KLF	S.SRC.34 UNT TO STONEY CREEK LEVER

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100								
Right Side	% Riparian Area>	1.00							100.0%	
	Score >	8							8	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	1.00							100.0%	
	Score >	8							8	
									Rt Sub-Index>	0.4000
									Lt Sub-Index>	0.4000
									CI	0.40

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100								
Right Side	% Riparian Area>	1.00							100.0%	
	Score >	8							8	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	1.00							100.0%	
	Score >	8							8	
									Rt Sub-Index>	0.4000
									Lt Sub-Index>	0.4000
									CI	0.40

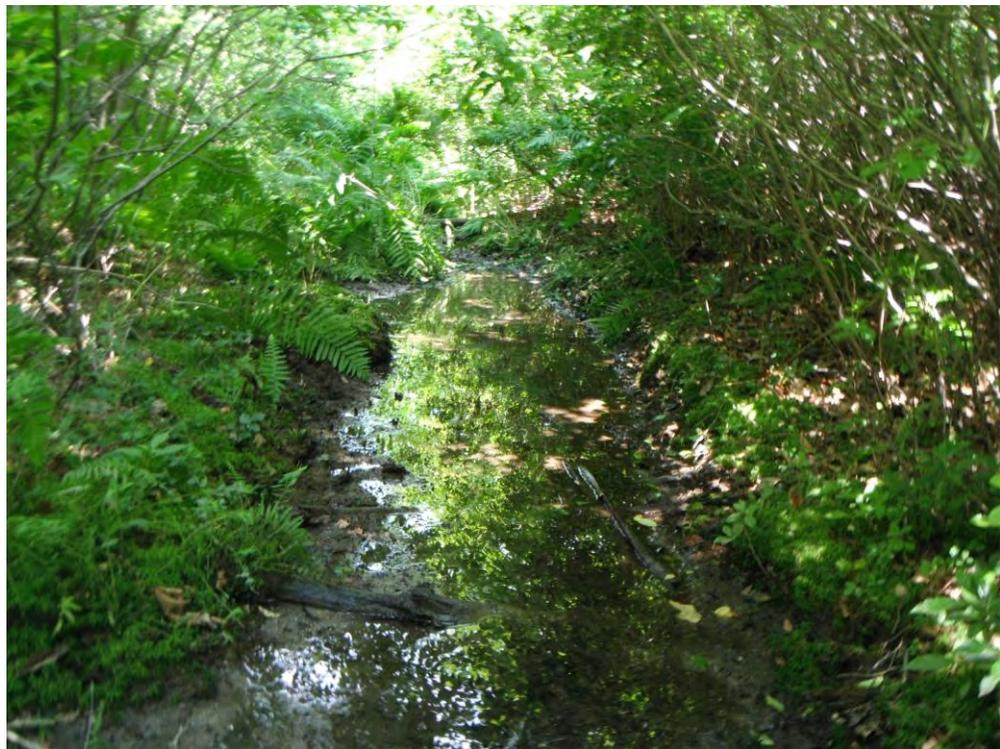
Comments:

ZOI IS CLEAR-CUT DECIDUOUS w/ ~15 YRS. OF GROWTH.

RIPARIAN ECOTONE CONDITION INDEX	RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.	0.40
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of Ci's)/2	0.40



**S-SRC-34 overview, facing upstream.**



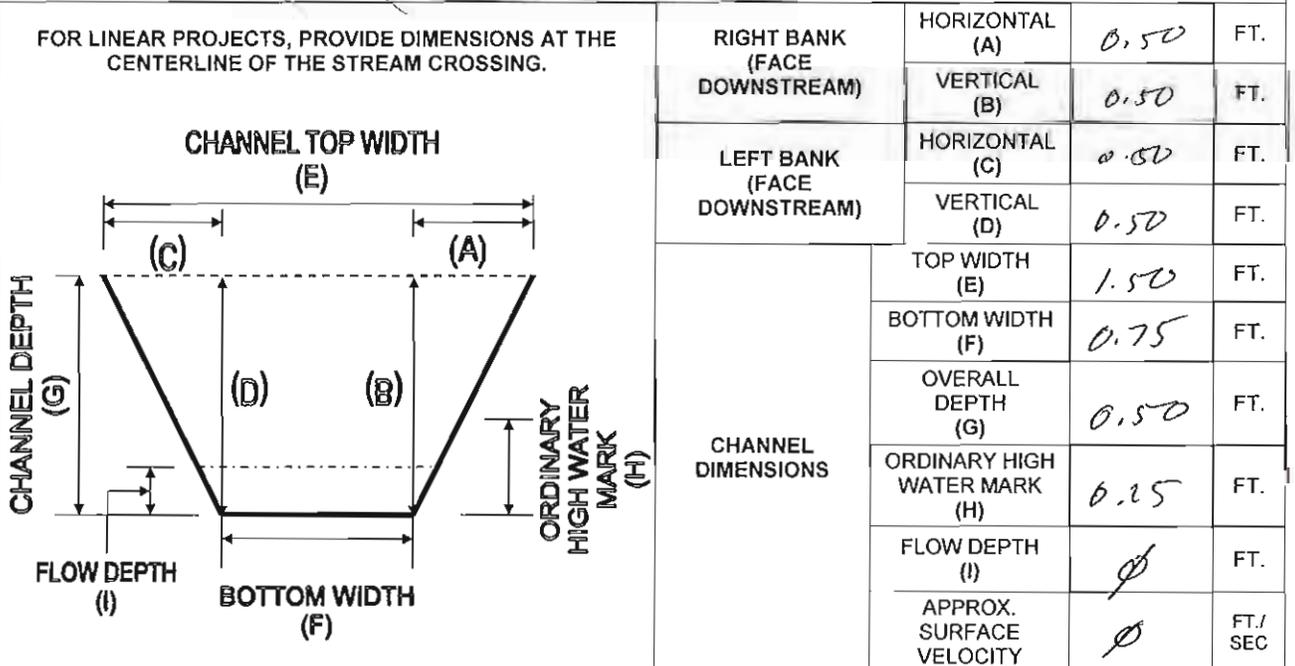
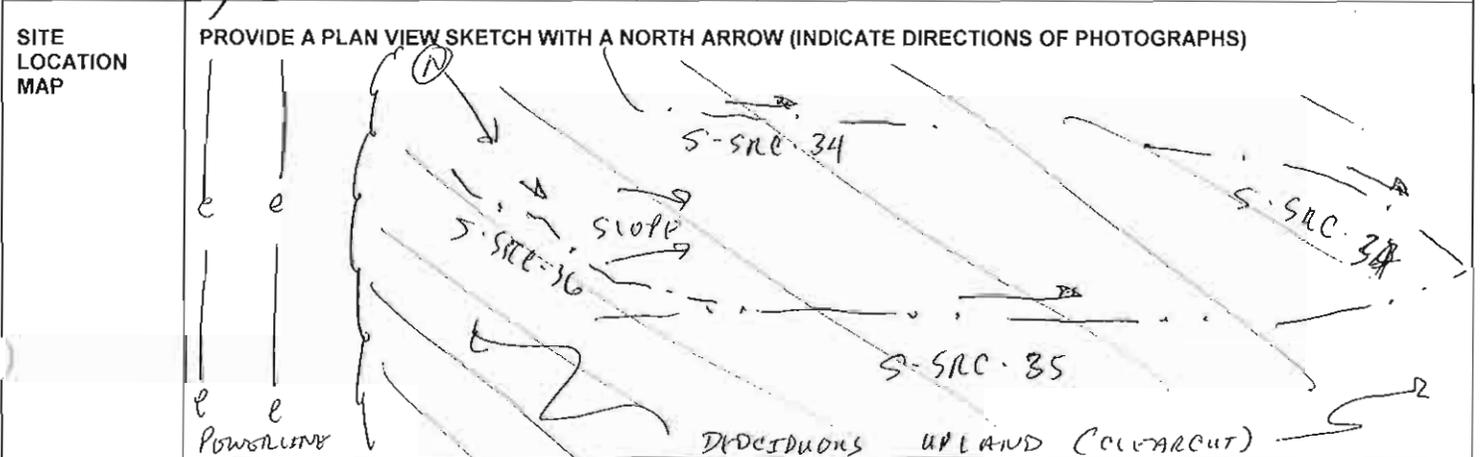
**S-SRC-34 overview, facing downstream.**

**STREAM S-SRC-35**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-35			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC	DATE	07.10.12	LOCATION	Somerset County, PA	
	LEE	TIME	10:15			
LATITUDE		LONGITUDE		RIVER BASIN	STONYCREEK RIVER	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>	AIR TEMPERATURE	75 °F
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>	OTHER	
	<input checked="" type="checkbox"/>	5 % CLOUD COVER	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	0 CLEAR/SUNNY	<input checked="" type="checkbox"/>			



STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	STONYCREEK RIVER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID:

S. SAC 35

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <u>RED MAPLE, WHITE OAK, MTN. LAUREL</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>~ 350</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>1.50</u> FT.	<input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input checked="" type="checkbox"/> PARTLY SHADED <input type="checkbox"/> SHADED	
LARGE WOODY DEBRIS	LWD	<u>—</u> FT. <sup>2</sup>	DENSITY OF LWD	
	DENSITY OF LWD	<u>—</u> FT. <sup>2</sup> /MI. <sup>2</sup>		
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"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT: _____ PORTION OF THE REACH WITH AQUATIC VEGETATION: _____ %			
WATER QUALITY	TEMPERATURE	_____ °C	WATER ODORS	
	SPEC. CONDUCTANCE	_____	<input type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER	<input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
WATER QUALITY	WQ INSTRUMENT USED		WATER SURFACE OILS	
			<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input type="checkbox"/> NONE <input type="checkbox"/> OTHER	
SEDIMENT/SUBSTRATE	OILS		TURBIDITY (IF NOT MEASURED)	
	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE	<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		

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~40
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	5	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	10			
SAND	0.06 - 0.2 MM (GRITTY)	10			
SILT	0.004 - 0.06 MM	60	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	15			





**S-SRC-35 overview, facing upstream.**



**S-SRC-35 overview, facing downstream.**

**STREAM S-SRC-36**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SRC. 36			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLB	DATE	07.10.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:30	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	STONYCREEK RIVER	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>			
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	5 % CLOUD COVER	<input checked="" type="checkbox"/>	5		
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>		AIR TEMPERATURE	75 °F
					OTHER	

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

Return to S. SRC. 35 sketch.

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00	FT.
			VERTICAL (B)	0.50
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.
		VERTICAL (D)	0.50	FT.
CHANNEL DIMENSIONS		TOP WIDTH (E)	6.00	FT.
		BOTTOM WIDTH (F)	2.50	FT.
		OVERALL DEPTH (G)	0.75	FT.
		ORDINARY HIGH WATER MARK (H)	0.50	FT.
		FLOW DEPTH (I)	0.15	FT.
		APPROX. SURFACE VELOCITY	1.5, 0.0	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	STORM WATER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS.		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S.SAC.36

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> NO EVIDENCE	<input type="checkbox"/> SOME POTENTIAL SOURCES
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES	
	<input type="checkbox"/> AGRICULTURAL	<input type="checkbox"/> OTHER	LOCAL WATERSHED EROSION	
	<input type="checkbox"/> RESIDENTIAL		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input type="checkbox"/> TREES	<input type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input checked="" type="checkbox"/> HERBACEOUS
	DOMINANT SPECIES PRESENT? <i>RED MAPLE, WHITE OAK, CINNAMOON FERN</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~100</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>6.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input checked="" type="checkbox"/> PARTLY SHADED <input type="checkbox"/> SHADED
	STUDY REACH AREA	- AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	- SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>90</i> %	<input type="checkbox"/> RUN <i>0</i> %
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL <i>0</i> %	<input type="checkbox"/> CHANNELIZED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	TAXA PRESENT	-	DAM PRESENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> ROOTED EMERGENT	<input type="checkbox"/> ROOTED SUBMERGENT	<input type="checkbox"/> ROOTED FLOATING	
	<input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> FREE FLOATING	
	DOMINANT SPECIES PRESENT <i>SPAGNUM MOSSES</i>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>80</i> %			
WATER QUALITY	TEMPERATURE	- °C	WATER ODORS	
	SPEC. CONDUCTANCE	-	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY	-	WATER SURFACE OILS	
	WQ INSTRUMENT USED	-	<input checked="" type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
		<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS	
		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER	
		TURBIDITY (IF NOT MEASURED)		
		<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	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS	
	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER		
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE		

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>80</i>
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	-	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>10</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>60</i>	MARL	GREY, SHELL FRAGMENTS	
CLAY	<0.004 MM (SLICK)	<i>20</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A113	PTC ALLEGHENY TURNER			07.10.12	S.S.R.C.36	
Name(s) of Evaluator(s)		Stream Name and Information				
S.R.C. KLE		UNT TO STONEY CREEK RIVER, S.S.R.C.36				

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100																			
Right Side	% Riparian Area >	1.00																			100.0%
	Score >	8																			8
		CI = Sum (Rt and Lt sub-Indexes)/2																			
Left Side	% Riparian Area >	1.00																			100.0%
	Score >	8																			8
		Rt Sub-Index > 0.60 0.60																			
		Lt Sub-Index > 0.60 0.60																			
		CI 0.60																			

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100																			
Right Side	% Riparian Area >	1.00																			100.0%
	Score >	8																			8
		CI = Sum (Rt and Lt sub-Indexes)/2																			
Left Side	% Riparian Area >	1.00																			100.0%
	Score >	8																			8
		Rt Sub-Index > 0.60 0.60																			
		Lt Sub-Index > 0.60 0.60																			
		CI 0.60																			

Comments:  
 ZOI CONSISTS OF UPLAND, DISJUNCTION CLEARCUT W/ ~15 YEARS OF GROWTH.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.60
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CIs)/2		0.60



**S-SRC-36 overview, facing upstream.**



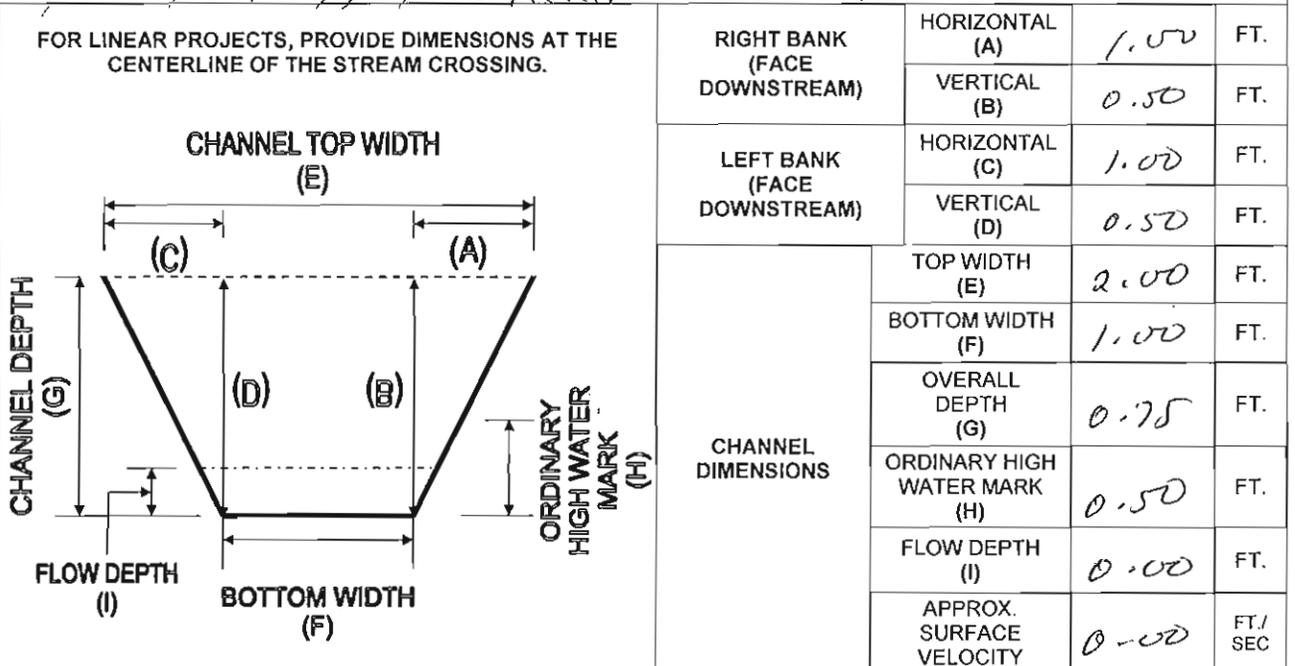
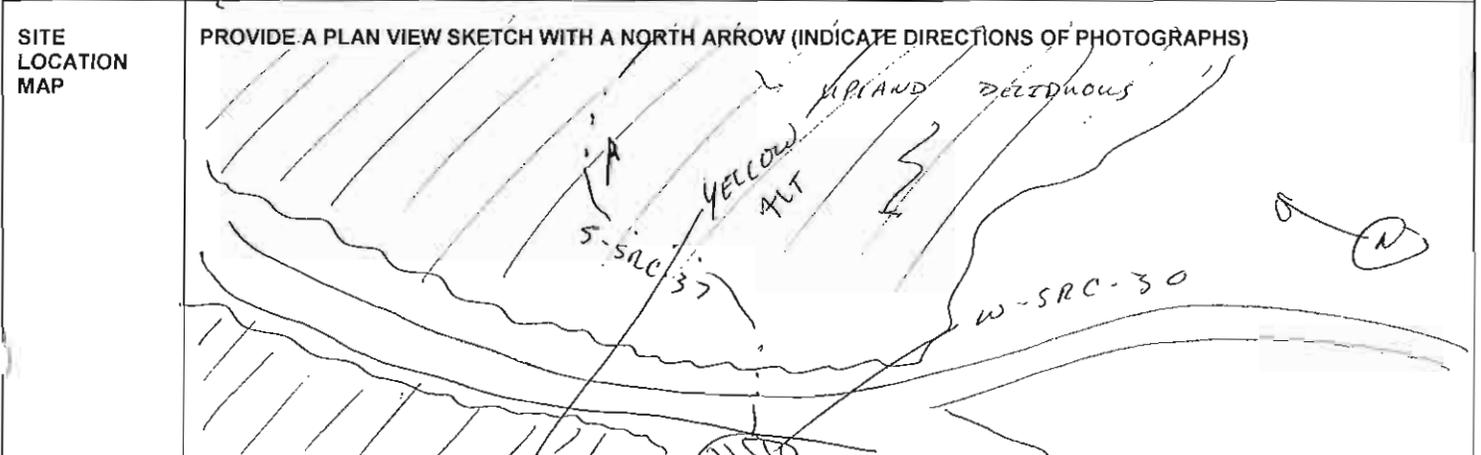
**S-SRC-36 overview, facing downstream.**

**STREAM S-SRC-37**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-37			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC JLG	DATE	07.12.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	12:56	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JUNIATA R.	
STATION #	-	RIVERMILE	-	STORET #		

WEATHER CONDITIONS	NOW		PAST 24 HOURS			HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>			AIR TEMPERATURE	80	°F
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			OTHER		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>					
	<input checked="" type="checkbox"/>	0	% CLOUD COVER	0	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>					



STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input checked="" type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input type="checkbox"/> SPRING FED	S FROM WATER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID:

S - SAC. 37

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	<b>PREDOMINANT SURROUNDING LANDUSE</b> <input checked="" type="checkbox"/> FOREST <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> OTHER <input type="checkbox"/> RESIDENTIAL		<b>LOCAL WATERSHED NPS POLLUTION</b> <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES	
			<b>LOCAL WATERSHED EROSION</b> <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
RIPARIAN VEG. (18 M. BUFFER)	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS			
	DOMINANT SPECIES PRESENT? <u>STRIPED MAPLE, WITH HAZEL</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>~400</u> FT.	<b>CANOPY COVER</b> <input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STREAM WIDTH	<u>2.00</u> FT.		
	STUDY REACH AREA	- AC.		
	EST. DRAINAGE AREA	- SQ. MI.		
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b> <input type="checkbox"/> RIFFLE <input type="checkbox"/> RUN <input type="checkbox"/> POOL <input type="checkbox"/> DAM PRESENT		
TAXA PRESENT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO		
LARGE WOODY DEBRIS	LWD	~	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED-FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING			
	DOMINANT SPECIES PRESENT PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
WATER QUALITY	TEMPERATURE	_____ °C	<b>WATER ODORS</b> <input type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
	SPEC. CONDUCTANCE		<b>WATER SURFACE OILS</b> <input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input type="checkbox"/> NONE <input type="checkbox"/> OTHER	
	DISSOLVED OXYGEN		<b>TURBIDITY (IF NOT MEASURED)</b> <input type="checkbox"/> CLEAR <input type="checkbox"/> SLIGHTLY TURBID <input type="checkbox"/> TURBID <input type="checkbox"/> OPAQUE <input type="checkbox"/> STAINED <input type="checkbox"/> OTHER	
	pH		WQ INSTRUMENT USED _____	
SEDIMENT/SUBSTRATE	<b>ODORS</b> <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		<b>DEPOSITS</b> <input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	
	<b>OILS</b> <input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~70
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	5	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	20			
SAND	0.06 - 0.2 MM (GRITTY)	25			
SILT	0.004 - 0.06 MM	30	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	20			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY TRIMMER			07.12.12	S.SAC.37	
Name(s) of Evaluator(s)		Stream Name and Information				
SAC, XIE		S.SAC.37 UNT TO RAYSDOWN BR., JUNIATA R.				

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>	
	Optimal		Suboptimal		Marginal		Poor			
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, moved, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions	High		Low
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1						

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100								
Right Side	% Riparian Area>	0.20	0.20						100.0%	
	Score >	16	6						14	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	0.20	0.20						100.0%	Rt Sub-Index> 0.70, 0.00
	Score >	16	6						14	Lt Sub-Index> 0.70, 0.00
CI = 0.70										

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>	
	Optimal		Suboptimal		Marginal		Poor			
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, moved, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions	High		Low
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1						

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100								
Right Side	% Riparian Area>	0.20	0.20						100.0%	
	Score >	16	6						14	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	0.20	0.20						100.0%	Rt Sub-Index> 0.70, 0.00
	Score >	16	6						14	Lt Sub-Index> 0.70, 0.00
CI = 0.70										

Comments:

ZOI CONSISTS OF UPLAND, DECIDUOUS FORESTS (MATURE) AND MOWED - MAINTAINED AREA ADJ. TO EXISTING GRAVEL ACCESS ROAD.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.70
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.70
RECI = (Sum of CIs)/2		



**S-SRC-37 overview, facing upstream.**



**S-SRC-37 overview, facing downstream.**

**STREAM S-SRC-38**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	<i>S.SRC. 38</i>			CLIENT	PTC
STREAM CLASS	<i>INTERMITTENT</i>			PROJECT	Allegheny Tunnel
INVESTIGATORS	<i>SRC</i>	DATE	<i>07.12.12</i>	MM/DD/YR	LOCATION
	<i>HLK</i>	TIME	<i>13:19</i>	24 HOUR (I.E. 16:45)	
LATITUDE		LONGITUDE		RIVER BASIN	<i>RAYSTOWN BR., JUNIATA R.</i>
STATION #	-	RIVERMILE		STORET #	-

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	0	% CLOUD COVER	0	
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>		AIR TEMPERATURE <i>80</i> °F
					OTHER

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="text-align: center;">RIGHT BANK (FACE DOWNSTREAM)</td> <td style="text-align: center;">HORIZONTAL (A)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (B)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="2" style="text-align: center;">LEFT BANK (FACE DOWNSTREAM)</td> <td style="text-align: center;">HORIZONTAL (C)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (D)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td style="text-align: center;">TOP WIDTH (E)</td> <td style="text-align: center;"><i>1.00</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">BOTTOM WIDTH (F)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">OVERALL DEPTH (G)</td> <td style="text-align: center;"><i>0.50</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">ORDINARY HIGH WATER MARK (H)</td> <td style="text-align: center;"><i>0.25</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">FLOW DEPTH (I)</td> <td style="text-align: center;"><i>&lt;0.10</i></td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">APPROX. SURFACE VELOCITY</td> <td style="text-align: center;"><i>1.50</i></td> <td style="text-align: center;">FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	<i>0.50</i>	FT.	VERTICAL (B)	<i>0.50</i>	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	<i>0.50</i>	FT.	VERTICAL (D)	<i>0.50</i>	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	<i>1.00</i>	FT.	BOTTOM WIDTH (F)	<i>0.50</i>	FT.	OVERALL DEPTH (G)	<i>0.50</i>	FT.	ORDINARY HIGH WATER MARK (H)	<i>0.25</i>	FT.	FLOW DEPTH (I)	<i>&lt;0.10</i>	FT.	APPROX. SURFACE VELOCITY	<i>1.50</i>	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		<i>0.50</i>	FT.																														
	VERTICAL (B)	<i>0.50</i>	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	<i>0.50</i>	FT.																															
	VERTICAL (D)	<i>0.50</i>	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	<i>1.00</i>	FT.																															
	BOTTOM WIDTH (F)	<i>0.50</i>	FT.																															
	OVERALL DEPTH (G)	<i>0.50</i>	FT.																															
	ORDINARY HIGH WATER MARK (H)	<i>0.25</i>	FT.																															
	FLOW DEPTH (I)	<i>&lt;0.10</i>	FT.																															
	APPROX. SURFACE VELOCITY	<i>1.50</i>	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA <input type="text"/> SQ. MI.	
	STREAM ORIGIN		MIXTURE OF ORIGINS	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	<i>Stormwater</i>	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: *S.SRC.38*

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>			<b>LOCAL WATERSHED NPS POLLUTION</b>							
	<input checked="" type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> NO EVIDENCE	<input type="checkbox"/> SOME POTENTIAL SOURCES	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES				
	<input type="checkbox"/> AGRICULTURAL	<input type="checkbox"/> OTHER	<b>LOCAL WATERSHED EROSION</b>								
	<input type="checkbox"/> RESIDENTIAL		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> MODERATE	<input type="checkbox"/> HEAVY						
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>										
	<input checked="" type="checkbox"/> TREES	<input type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input type="checkbox"/> HERBACEOUS							
<b>INSTREAM FEATURES</b>	DOMINANT SPECIES PRESENT? _____										
	STUDY LENGTH	<i>~400</i>	FT.	<b>CANOPY COVER</b>							
	STREAM WIDTH	<i>1.00</i>	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN	<input checked="" type="checkbox"/> PARTLY SHADED	<input type="checkbox"/> SHADED				
	STUDY REACH AREA	<i>-</i>	AC.	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>							
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	<input checked="" type="checkbox"/> RIFFLE	<i>25</i>	%	<input type="checkbox"/> RUN	<i>  </i>	%		
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL	<i>  </i>	%	<input type="checkbox"/> CHANNELIZED	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> DAM PRESENT	<input type="checkbox"/> YES
TAXA PRESENT	<i>  </i>										
<b>LARGE WOODY DEBRIS</b>	LWD	<i>-</i>		FT. <sup>2</sup>							
	DENSITY OF LWD	<i>-</i>		FT. <sup>2</sup> /MI. <sup>2</sup>							
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>										
	<input type="checkbox"/> ROOTED EMERGENT	<input type="checkbox"/> ROOTED SUBMERGENT	<input type="checkbox"/> ROOTED FLOATING	<input type="checkbox"/> FLOATING ALGAE			<input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> FREE FLOATING			
DOMINANT SPECIES PRESENT _____											
PORTION OF THE REACH WITH AQUATIC VEGETATION _____						%					
<b>WATER QUALITY</b>	TEMPERATURE	°C		<b>WATER ODORS</b>							
	SPEC. CONDUCTANCE			<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE						
	DISSOLVED OXYGEN			<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL						
	pH			<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER						
	TURBIDITY			<b>WATER SURFACE OILS</b>							
	WQ INSTRUMENT USED			<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily						
			<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS							
			<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER							
			<b>TURBIDITY (IF NOT MEASURED)</b>								
			<input checked="" type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID							
			<input type="checkbox"/> TURBID	<input type="checkbox"/> OPAQUE							
			<input type="checkbox"/> STAINED	<input type="checkbox"/> OTHER							
<b>SEDIMENT/ SUBSTRATE</b>	<b>ODORS</b>			<b>DEPOSITS</b>							
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST							
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND							
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS								
<input type="checkbox"/> OTHER				<input type="checkbox"/> OTHER							
<b>OILS</b>			<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>								
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO								
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE										

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>5</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~25</i>
BOULDER	256 MM (10"+)	<i>5</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>35</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>40</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>5</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
CLAY	<0.004 MM (SLICK)	<i>-</i>			





**S-SRC-38 overview, facing upstream.**



**S-SRC-38 overview, facing downstream.**

**STREAM S-SRC-39**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-39			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC ILLE	DATE	07.12.12	LOCATION	Somerset County, PA	
		TIME	1415			
LATITUDE		LONGITUDE		RIVER BASIN	Raystown Br., Juniata R.	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO  AIR TEMPERATURE <span style="border: 1px solid black; padding: 2px;">80</span> °F  OTHER <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input type="checkbox"/>	
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>	
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	0	% CLOUD COVER	0	
	<input checked="" type="checkbox"/>	CLEAR/SUNNY		<input checked="" type="checkbox"/>	

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

UPLAND DECIDUOUS FOREST

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.  	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.50	FT.
			VERTICAL (B)	1.00
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.50	FT.
		VERTICAL (D)	1.00	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.
		BOTTOM WIDTH (F)	6.00	FT.
		OVERALL DEPTH (G)	1.25	FT.
		ORDINARY HIGH WATER MARK (H)	0.75	FT.
		FLOW DEPTH (I)	0.00	FT.
		APPROX. SURFACE VELOCITY	<5	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA <span style="border: 1px solid black; display: inline-block; width: 50px; height: 15px;"></span> SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	STORM WATER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SRC-39

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>			<b>LOCAL WATERSHED NPS POLLUTION</b>		
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER		<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES	
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>SWEET BIRCH, WHITE HAZEL, TULIP POPLAR</i>					
<b>INSTREAM FEATURES</b>	STUDY LENGTH	<i>~300</i>	FT.	<b>CANOPY COVER</b>		
	STREAM WIDTH	<i>8.00</i>	FT.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	STUDY REACH AREA	<i>-</i>	AC.	OPEN	PARTLY OPEN	PARTLY SHADED
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	SHADED		
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/>	YES	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>			
TAXA PRESENT	<i>-</i>	NO	<input checked="" type="checkbox"/> RIFFLE	<i>25</i>	%	<input type="checkbox"/> RUN
			<input type="checkbox"/> POOL		%	
			CHANNELIZED	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
			DAM PRESENT	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
<b>LARGE WOODY DEBRIS</b>	LWD	<i>-</i>	FT. <sup>2</sup>			
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>			
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FREE FLOATING	DOMINANT SPECIES PRESENT <i>SPIROGONUM, Jewel weed</i>		
<b>WATER QUALITY</b>	TEMPERATURE			WATER ODORS		
	SPEC. CONDUCTANCE			<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE	
	DISSOLVED OXYGEN			<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	
	pH			<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER	
	TURBIDITY			WATER SURFACE OILS		
	WQ INSTRUMENT USED			<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily	
			<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS		
			<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER		
			TURBIDITY (IF NOT MEASURED)			
			<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		
<b>SEDIMENT/SUBSTRATE</b>	<b>ODORS</b>			<b>DEPOSITS</b>		
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST		
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND		
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS			
<b>OILS</b>			<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>			
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO			
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE					

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>-</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~30</i>
BOULDER	256 MM (10"+)	<i>15</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>40</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>5</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
CLAY	<0.004 MM (SLICK)	<i>-</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as Intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY TUNNEL			07.12.12	S. SRC. 39	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KUE	S. SRC. 39, UNT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100																		
Right Side	% Riparian Area >	1.00																		100.0%
	Score >	18																		18
		CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area >	1.00																		100.0%
	Score >	18																		18
		Rt Sub-Index > 0.9000																		
		Lt Sub-Index > 0.9000																		
		CI 0.90																		

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100																		
Right Side	% Riparian Area >	1.00																		100.0%
	Score >	18																		18
		CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area >	1.00																		100.0%
	Score >	18																		18
		Rt Sub-Index > 0.9000																		
		Lt Sub-Index > 0.9000																		
		CI 0.90																		

Comments:

ZOI CONSISTS OF UPLAND, DELICIOUS FOREST (MATURE).

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CIs)/2		0.90



**S-SRC-39 overview, facing upstream.**



**S-SRC-39 overview, facing downstream.**

**STREAM S-SRC-40**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SALC-40		CLIENT	PTC
STREAM CLASS		PERENNIAL		PROJECT	Allegheny Tunnel
INVESTIGATORS	SRC	DATE	01.12.12	LOCATION	Somerset County, PA
	KLE	TIME	14:15		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSONN DR., JUNSTON R.
STATION #	-	RIVERMILE	-	STORET #	-

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	% CLOUD COVER	0	<input checked="" type="checkbox"/>	AIR TEMPERATURE
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>		80 °F
					OTHER

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

*Refer to field sketch S-SALC-37*

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.
		VERTICAL (B)	2.00	FT.
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.
		VERTICAL (D)	2.00	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.
		BOTTOM WIDTH (F)	6.00	FT.
		OVERALL DEPTH (G)	2.00	FT.
		ORDINARY HIGH WATER MARK (H)	1.00	FT.
		FLOW DEPTH (I)	< 0.10	FT.
		APPROX. SURFACE VELOCITY	< 5.00	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER <i>Streamway</i>		

STREAM ID: S-SAC-40

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	<b>PREDOMINANT SURROUNDING LANDUSE</b> <input checked="" type="checkbox"/> FOREST <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> OTHER <input type="checkbox"/> RESIDENTIAL		<b>LOCAL WATERSHED NPS POLLUTION</b> <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES	
	<b>LOCAL WATERSHED EROSION</b> <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY			
RIPARIAN VEG. (18 M. BUFFER)	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS			
	DOMINANT SPECIES PRESENT? <i>SWEET BIRCH, RED OAK, WHITE HAZEL</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~300</i> FT.	<b>CANOPY COVER</b> <input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STREAM WIDTH	<i>8.00</i> FT.		
	STUDY REACH AREA	— AC.		
	EST. DRAINAGE AREA	— SQ. MI.		
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b> <input checked="" type="checkbox"/> RIFFLE <i>30</i> % <input type="checkbox"/> RUN <input type="checkbox"/> % <input type="checkbox"/> POOL <input type="checkbox"/> %		
TAXA PRESENT	<i>CADDIS, MAYFLY</i>		CHANNELIZED DAM PRESENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	—	FT. <sup>2</sup>	
	DENSITY OF LWD	—	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING			
	DOMINANT SPECIES PRESENT <i>SPHAGNUM, JEWEL WEED</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>60</i> %			
WATER QUALITY	TEMPERATURE	— °C	<b>WATER ODORS</b> <input checked="" type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
	SPEC. CONDUCTANCE	—		
	DISSOLVED OXYGEN	—		
	pH	—		
	TURBIDITY	—	<b>WATER SURFACE OILS</b> <input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input checked="" type="checkbox"/> NONE <input type="checkbox"/> OTHER	
	WQ INSTRUMENT USED	<b>TURBIDITY (IF NOT MEASURED)</b> <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> SLIGHTLY TURBID <input type="checkbox"/> TURBID <input type="checkbox"/> OPAQUE <input type="checkbox"/> STAINED <input type="checkbox"/> OTHER		
SEDIMENT/SUBSTRATE	<b>ODORS</b> <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		<b>DEPOSITS</b> <input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	
	<b>OILS</b> <input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	—	<i>5</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~30</i>
BOULDER	256 MM (10"+)	<i>5</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	—
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>40</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>20</i>			
SILT	0.004 - 0.06 MM	—	MARL	GREY, SHELL FRAGMENTS	—
CLAY	<0.004 MM (SLICK)	<i>~</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0  
For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A11J	PTC ALLEGHENY TUNNEL			07.12.12	S.SRC.40	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, RLE		S.SRC.40 UNT TO RAYSTOWN BR., JUNIATA R.				

**1. RIPARIAN VEGETATION:** Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category												NOTES>>							
	Optimal			Suboptimal			Marginal			Poor										
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.			High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.			Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).			High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.				Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.			High Poor: Lawns, moved, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.			Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.
			High			Low			High			Low								
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along the floodplain using the descriptors above.																			
2. Estimate the % area within each condition category. Calculators are provided for you below.																			
3. Enter the % Riparian Area and Score for each category in the blocks below.																			
Ensure the sums of % Riparian Blocks equal 100																			
Right Side	% Riparian Area>	1.00																	100.0%
	Score >	18																	18
CI = Sum (Rt and Lt sub-Indexes)/2																			
Left Side	% Riparian Area>	1.00																	100.0%
	Score >	18																	18
Rt Sub-Index> 0.900.00																			
Lt Sub-Index> 0.900.00																			
CI 0.90																			

**2. RIPARIAN ZONE OF INFLUENCE:** Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category												NOTES>>							
	Optimal			Suboptimal			Marginal			Poor										
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.			High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.			Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).			High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.				Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.			High Poor: Lawns, moved, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.			Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.
			High			Low			High			Low								
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.																			
2. Estimate the % area within each condition category. Calculators are provided for you below.																			
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.																			
Ensure the sums of % Riparian ZOI Blocks equal 100																			
Right Side	% Riparian Area>	1.00																	100.0%
	Score >	18																	18
CI = Sum (Rt and Lt sub-Indexes)/2																			
Left Side	% Riparian Area>	1.00																	100.0%
	Score >	18																	18
Rt Sub-Index> 0.900.00																			
Lt Sub-Index> 0.900.00																			
CI 0.90																			

Comments:  
ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX	RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.	0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2	0.90



**S-SRC-40 overview, facing upstream.**



**S-SRC-40 overview, facing downstream.**

**STREAM S-SRC-41**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-41			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SNC JLB	DATE	07.12.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	14:30			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN B.D., JUNIATA R.	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>	AIR TEMPERATURE	80	°F
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>	OTHER		
	<input checked="" type="checkbox"/>	0	% CLOUD COVER	0		
<input checked="" type="checkbox"/>	CLEAR/SUNNY		<input checked="" type="checkbox"/>			

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td>1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>6.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>4.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>0.75</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td>0.00</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td>0.00</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.	VERTICAL (B)	1.50	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.	VERTICAL (D)	1.50	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	6.00	FT.	BOTTOM WIDTH (F)	4.00	FT.	OVERALL DEPTH (G)	1.50	FT.	ORDINARY HIGH WATER MARK (H)	0.75	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		1.00	FT.																														
	VERTICAL (B)	1.50	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.																															
	VERTICAL (D)	1.50	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	6.00	FT.																															
	BOTTOM WIDTH (F)	4.00	FT.																															
	OVERALL DEPTH (G)	1.50	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.75	FT.																															
	FLOW DEPTH (I)	0.00	FT.																															
	APPROX. SURFACE VELOCITY	0.00	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input checked="" type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA <input type="checkbox"/> SQ. MI.	
STREAM ORIGIN		OTHER		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/> STORM WATER		
<input type="checkbox"/>	NON-GLACIAL MONTANE			
<input type="checkbox"/>	SWAMP AND BOG			

STREAM ID: S-SAC-41

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>			<b>LOCAL WATERSHED NPS POLLUTION</b>		
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER		<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES	
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <u>SUGAR MAPLE, WITCH HAZEL</u>					
<b>INSTREAM FEATURES</b>	STUDY LENGTH	<u>300</u>	FT.	<b>CANOPY COVER</b>		
	STREAM WIDTH	<u>6:0</u>	FT.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	STUDY REACH AREA	<u>—</u>	AC.	OPEN	PARTLY OPEN	PARTLY SHADED
	EST. DRAINAGE AREA	<u>—</u>	SQ. MI.	SHADED <input checked="" type="checkbox"/>		
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>			
TAXA PRESENT	<u>—</u>		<input type="checkbox"/> RIFFLE	<input type="checkbox"/> POOL	<input type="checkbox"/> RUN	
			CHANNELIZED DAM PRESENT <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>LARGE WOODY DEBRIS</b>	LWD	<u>—</u>	FT. <sup>2</sup>			
	DENSITY OF LWD	<u>—</u>	FT. <sup>2</sup> /MI. <sup>2</sup>			
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>					
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FREE FLOATING	DOMINANT SPECIES PRESENT <u>SALICORNIA, FLOWERING DOGS</u>		
	PORTION OF THE REACH WITH AQUATIC VEGETATION <u>40</u> %					
<b>WATER QUALITY</b>	TEMPERATURE	<u>—</u>	°C	<b>WATER ODORS</b>		
	SPEC. CONDUCTANCE	<u>—</u>		<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE	
	DISSOLVED OXYGEN	<u>—</u>		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	
	pH	<u>—</u>		<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER	
	TURBIDITY	<u>—</u>		<b>WATER SURFACE OILS</b>		
	WQ INSTRUMENT USED	<u>—</u>		<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily	
			<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS		
			<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER		
			<b>TURBIDITY (IF NOT MEASURED)</b>			
			<input type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID		
			<input type="checkbox"/> TURBID	<input type="checkbox"/> OPAQUE		
			<input type="checkbox"/> STAINED	<input type="checkbox"/> OTHER		
<b>SEDIMENT/SUBSTRATE</b>	<b>ODORS</b>			<b>DEPOSITS</b>		
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC		<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST	
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE		<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND	
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL		<input type="checkbox"/> RELICT SHELLS		
	<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER			
	<b>OILS</b>			<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>		
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
	<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE				

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<u>10</u>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<u>~80</u>
BOULDER	256 MM (10"+)	<u>25</u>			
COBBLE	64 - 256 MM (2.5 - 10")	<u>25</u>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<u>—</u>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<u>25</u>			
SAND	0.06 - 0.2 MM (GRITTY)	<u>10</u>			
SILT	0.004 - 0.06 MM	<u>25</u>	MARL	GREY, SHELL FRAGMENTS	<u>—</u>
CLAY	<0.004 MM (SLICK)				

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0  
For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	RT ALLEGHENY TUNNEL			07.12.12	S. SRC-41	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KLE	S. SRC-41 UNT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-fill cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

Ensure the sums of % Riparian Blocks equal 100																		
Right Side	% Riparian Area>	1.00														100.0%		
	Score >	18														18		
CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area>	1.00														100.0%	Rt Sub-Index> 0.9000	CI
	Score >	18														18	Lt Sub-Index> 0.9000	0.90
CI = Sum (Rt and Lt sub-Indexes)/2																		

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-fill cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

Ensure the sums of % Riparian ZOI Blocks equal 100																		
Right Side	% Riparian Area>	1.00														100.0%		
	Score >	18														18		
CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area>	1.00														100.0%	Rt Sub-Index> 0.9000	CI
	Score >	18														18	Lt Sub-Index> 0.9000	0.90
CI = Sum (Rt and Lt sub-Indexes)/2																		

Comments:

ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX																RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.																0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)																0.90
RECI = (Sum of CI's)/2																0.90



**S-SRC-41 overview, facing upstream.**



**S-SRC-41 overview, facing downstream.**

**STREAM S-SRC-42**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-42	CLIENT	PTC
STREAM CLASS	PERENNIAL	PROJECT	Allegheny Tunnel
INVESTIGATORS	SAP JLE	DATE	07.16.12
		TIME	09:53
LATITUDE		MM/DD/YR	24 HOUR (I.E. 16:45)
STATION #	-	LOCATION	Somerset County, PA
		RIVER BASIN	RAYSTOWN BR., JUNIATA R.
		RIVERMILE	-
		STORET #	-

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input checked="" type="checkbox"/>		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input checked="" type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	100 % CLOUD COVER	<input checked="" type="checkbox"/>	AIR TEMPERATURE	75 °F
<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>	OTHER	A.M. FOG @ RIDGE	

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td>2.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>2.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="6">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>7.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>4.50</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td>0.15</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td>2.5</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00	FT.	VERTICAL (B)	1.50	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.	VERTICAL (D)	1.50	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	7.00	FT.	BOTTOM WIDTH (F)	4.50	FT.	OVERALL DEPTH (G)	1.50	FT.	ORDINARY HIGH WATER MARK (H)	0.50	FT.	FLOW DEPTH (I)	0.15	FT.	APPROX. SURFACE VELOCITY	2.5	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		2.00	FT.																														
	VERTICAL (B)	1.50	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.																															
	VERTICAL (D)	1.50	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	7.00	FT.																															
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	OVERALL DEPTH (G)	1.50	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.50	FT.																															
	FLOW DEPTH (I)	0.15	FT.																															
	APPROX. SURFACE VELOCITY	2.5	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER: <u>Stormwater</u>	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SLC-42

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

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"/> OTHER <input type="checkbox"/> RESIDENTIAL		LOCAL WATERSHED NPS POLLUTION <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES	
			LOCAL WATERSHED EROSION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>SUBAL MAPLE, STRIPED MAPLE, BLACK BIRCH, SPECK BUSH</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>2300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>7.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN
	STUDY REACH AREA	- AC.	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
	EST. DRAINAGE AREA	- SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> RIFFLE	<i>80</i> %
	TAXA PRESENT	<i>CADDIS, STONELY</i>	<input type="checkbox"/> POOL	<input type="checkbox"/> RUN
			<input type="checkbox"/> CHANNELIZED	<input type="checkbox"/> YES
			<input type="checkbox"/> DAM PRESENT	<input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input checked="" type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING			
	DOMINANT SPECIES PRESENT <i>SAGNUM MOSS, JEWEL WEED</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>70</i> %			
WATER QUALITY	TEMPERATURE	- °C	WATER ODORS	
	SPEC. CONDUCTANCE	-	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY	-	WATER SURFACE OILS	
	WQ INSTRUMENT USED	-	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
			<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
			<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER
			TURBIDITY (IF NOT MEASURED)	
			<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
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST
<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND	
<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS		
<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER		
OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE			

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	~	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~ 60
BOULDER	256 MM (10"+)	25			
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 - 0.2 MM (GRITTY)	20			
SILT	0.004 - 0.06 MM	5	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY TUNNEL			07.16.12	S.SRC.42	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KLF	S.SRC.42, INT TO RAINSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: ImperVIOUS surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100							
Right Side	% Riparian Area>	1.00							100.0%
	Score >	18							18
		CI = Sum (Rt and Lt sub-Indexes)/2							
Left Side	% Riparian Area>	1.00							100.0%
	Score >	18							18
		Rt Sub-Index> 0.90 0.90							
		Lt Sub-Index> 0.90 0.90							
		CI 0.90							

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: ImperVIOUS surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100							
Right Side	% Riparian Area>	1.00							100.0%
	Score >	18							18
		CI = Sum (Rt and Lt sub-Indexes)/2							
Left Side	% Riparian Area>	1.00							100.0%
	Score >	18							18
		Rt Sub-Index> 0.90 0.90							
		Lt Sub-Index> 0.90 0.90							
		CI 0.90							

Comments:  
ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.90
RECI = (Sum of CI's)/2		



**S-SRC-42 overview, facing upstream.**



**S-SRC-42 overview, facing downstream.**

**STREAM S-SRC-43**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SAC-43			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KIC	DATE	07.16.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:05			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSOWN BL., JUNIATA A.	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input checked="" type="checkbox"/>		AIR TEMPERATURE	75 °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input checked="" type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>		OTHER	HEAVY A.M. FOG @ BRIDGE	
	<input checked="" type="checkbox"/>	100	% CLOUD COVER	50				
<input type="checkbox"/>	CLEAR/SUNNY		<input checked="" type="checkbox"/>					

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

REFER TO SKETCH FOR S. SAC-42.

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	3.00	FT.
			VERTICAL (B)	1.00
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.
		VERTICAL (D)	1.00	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	6.00	FT.
		BOTTOM WIDTH (F)	4.00	FT.
		OVERALL DEPTH (G)	1.00	FT.
		ORDINARY HIGH WATER MARK (H)	0.50	FT.
		FLOW DEPTH (I)	2.15	FT.
		APPROX. SURFACE VELOCITY	15.00	FT/ SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	PERENNIAL	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SPC-43

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION			
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES		
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT					
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS					
INSTREAM FEATURES	DOMINANT SPECIES PRESENT? <i>SUBAR MAPLE, STRIPED MAPLE, SWEET BIRCH, SPICE-BUSH</i>					
	STUDY LENGTH	<i>~300</i> FT.	CANOPY COVER			
	STREAM WIDTH	<i>6.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES			
EST. DRAINAGE AREA	SQ. MI.	<input checked="" type="checkbox"/> RIFFLE	<i>40</i> %	<input type="checkbox"/> RUN	<input type="checkbox"/> %	
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> POOL	<input type="checkbox"/> %			
TAXA PRESENT	<i>CADDIS, STONELY</i>		CHANNELIZED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. <sup>2</sup>			
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>			
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT					
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FREE FLOATING			
DOMINANT SPECIES PRESENT <i>SAGINAW WOODS, TWIG WOODS, CUTS-ROOT.</i>						
PORTION OF THE REACH WITH AQUATIC VEGETATION <i>30</i> %						
WATER QUALITY	TEMPERATURE	<i>-</i> °C	WATER ODORS			
	SPEC. CONDUCTANCE	<i>-</i>	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE		
	DISSOLVED OXYGEN	<i>-</i>	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL		
	pH	<i>-</i>	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER		
TURBIDITY	<i>-</i>	WATER SURFACE OILS				
WQ INSTRUMENT USED	<i>-</i>	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily			
		<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS			
		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER			
		TURBIDITY (IF NOT MEASURED)				
		<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			
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS			
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> OTHER	<input type="checkbox"/> ANAEROBIC <input type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL	<input type="checkbox"/> SLUDGE <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	<input type="checkbox"/> SAWDUST <input type="checkbox"/> SAND		
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?			
	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> MODERATE	<input type="checkbox"/> SLIGHT <input type="checkbox"/> PROFUSE	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~ 50</i>
BOULDER	256 MM (10"+)	<i>30</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>40</i>			
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>20</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
SILT	0.004 - 0.06 MM	-	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0  
For use in Wadeable channels classified as Intermittent or Perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
AA17	PTC ALLEGHENY TUNNEL			07.16.12	S.SAC.42	

Name(s) of Evaluator(s)	Stream Name and Information
	S.SAC.43 UNIT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along the floodplain using the descriptors above.											
2. Estimate the % area within each condition category. Calculators are provided for you below.											
3. Enter the % Riparian Area and Score for each category in the blocks below. <span style="float: right;">Ensure the sums of % Riparian Blocks equal 100</span>											
Right Side	% Riparian Area>	1.00								100.0%	
	Score >	18								18	
CI = Sum (Rt and Lt sub-Indexes)/2											
Left Side	% Riparian Area>	1.00								100.0%	5.90000
	Score >	18								18	0.00
CI											

0.90

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.											
2. Estimate the % area within each condition category. Calculators are provided for you below.											
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below. <span style="float: right;">Ensure the sums of % Riparian ZOI Blocks equal 100</span>											
Right Side	% Riparian Area>	1.00								100.0%	
	Score >	18								18	
CI = Sum (Rt and Lt sub-Indexes)/2											
Left Side	% Riparian Area>	1.00								100.0%	5.90000
	Score >	18								18	0.00
CI											

0.90

Comments:  
ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX	RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.	0.00
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2	0.90



**S-SRC-43 overview, facing upstream.**



**S-SRC-43 overview, facing downstream.**

**STREAM S-SRC-44**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SAC 44			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLU	DATE	07.16.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:20			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JAWORTH R.	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	YES
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input checked="" type="checkbox"/>		<input type="checkbox"/>	NO
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		AIR TEMPERATURE	
	<input checked="" type="checkbox"/>	100 % CLOUD COVER	<input checked="" type="checkbox"/>	50	75	°F
<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>		OTHER		HEAVY A.M. fog @ 11:00 AM

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	3.00	FT.
			VERTICAL (B)	1.00
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	7.00	FT.
		VERTICAL (D)	1.00	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	5.00	FT.
		BOTTOM WIDTH (F)	2.00	FT.
		OVERALL DEPTH (G)	1.00	FT.
		ORDINARY HIGH WATER MARK (H)	0.50	FT.
		FLOW DEPTH (I)	0.00	FT.
		APPROX. SURFACE VELOCITY	0.00	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	S. SAC 44	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-5A0-44

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	<b>PREDOMINANT SURROUNDING LANDUSE</b> <input checked="" type="checkbox"/> FOREST <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> OTHER <input type="checkbox"/> RESIDENTIAL		<b>LOCAL WATERSHED NPS POLLUTION</b> <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES	
			<b>LOCAL WATERSHED EROSION</b> <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
RIPARIAN VEG. (18 M. BUFFER)	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>ASH, SUGAR MAPLE, WITCH HAZEL, FALSE NETTLE</i>			
	<b>INSTREAM FEATURES</b> STUDY LENGTH <i>~300</i> FT. STREAM WIDTH <i>5.6</i> FT. STUDY REACH AREA <i>-</i> AC. EST. DRAINAGE AREA <i>-</i> SQ. MI. MACROINVERTEBRATES PRESENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO TAXA PRESENT <i>(ADD IS, STOM FLY)</i>		<b>CANOPY COVER</b> <input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED <b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b> <input type="checkbox"/> RIFFLE <i>-</i> % <input type="checkbox"/> RUN <i>-</i> % <input type="checkbox"/> POOL <i>-</i> % CHANNELIZED DAM PRESENT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <i>NO FLOW.</i>	
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. <sup>2</sup>	
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT <i>S PHENOM MOSS, JEWEL WOOD</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>70</i> %			
	WATER QUALITY	TEMPERATURE	<i>-</i>	°C
SPEC. CONDUCTANCE DISSOLVED OXYGEN pH TURBIDITY WQ INSTRUMENT USED		<b>WATER ODORS</b> <input type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER <b>WATER SURFACE OILS</b> <input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input type="checkbox"/> NONE <input type="checkbox"/> OTHER <b>TURBIDITY (IF NOT MEASURED)</b> <input type="checkbox"/> CLEAR <input type="checkbox"/> SLIGHTLY TURBID <input type="checkbox"/> TURBID <input type="checkbox"/> OPAQUE <input type="checkbox"/> STAINED <input type="checkbox"/> OTHER		
SEDIMENT/SUBSTRATE	<b>ODORS</b> <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		<b>DEPOSITS</b> <input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	
	<b>OILS</b> <input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~60</i>
BOULDER	256 MM (10"+)	<i>40</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>20</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>-</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
CLAY	<0.004 MM (SLICK)	<i>-</i>			





**S-SRC-44 overview, facing upstream.**



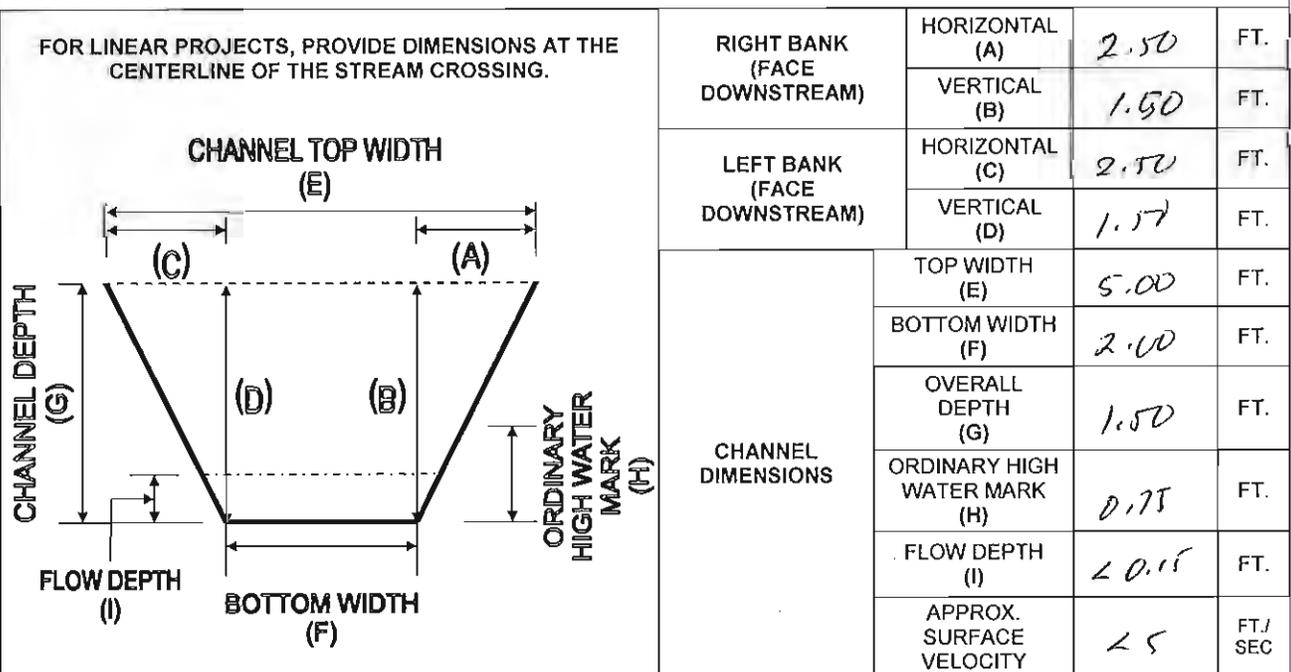
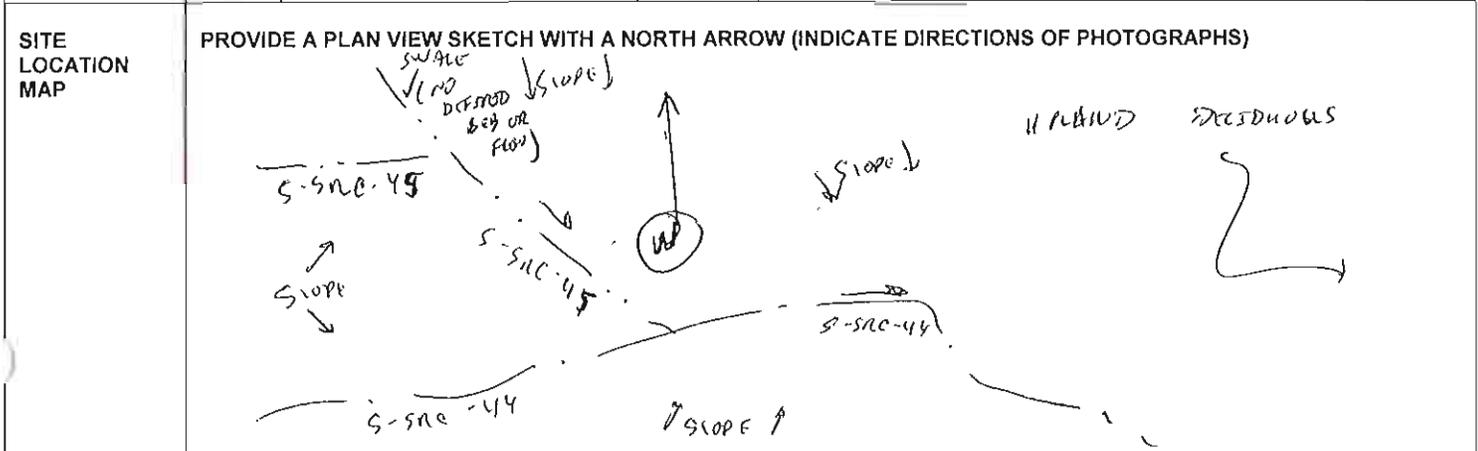
**S-SRC-44 overview, facing downstream.**

**STREAM S-SRC-45**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-45	CLIENT	PTC
STREAM CLASS	INTERMITTENT	PROJECT	Allegheny Tunnel
INVESTIGATORS	SRP KLV	DATE	07.16.12
		MM/DD/YR	24 HOUR (I.E. 16:45)
LATITUDE		LONGITUDE	
STATION #	-	RIVERMILE	-
		LOCATION	Somerset County, PA
		RIVER BASIN	RAYSDOWN BR. JUNIATA R.
		STORET #	-

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input checked="" type="checkbox"/>			
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input checked="" type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	100% CLOUD COVER	<input checked="" type="checkbox"/>	50%		
	<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>		AIR TEMPERATURE	75 °F
					OTHER	DENSE A.M. FOG @ R5DBK



STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER: <u>Storm water</u>	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SRE-115

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>		<b>LOCAL WATERSHED NPS POLLUTION</b>	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>			
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>YEW, BIRCH, SUGAR MAPLE, WETLAND HAZEL, SPEC. BUSH</i>			
<b>INSTREAM FEATURES</b>	STUDY LENGTH	<i>~300</i> FT.	<b>CANOPY COVER</b>	
	STREAM WIDTH	<i>5.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	- AC.	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>	
	EST. DRAINAGE AREA	- SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>25</i> %	<input type="checkbox"/> RUN <i>  </i> %
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> POOL	<input type="checkbox"/> CHANNELIZED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <i>LOW FLOW</i>	
TAXA PRESENT	<i>MEDGUS</i>			
<b>LARGE WOODY DEBRIS</b>	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>			
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT <i>SAGINAW MESS, JUNE WOOD, FALSE NETTLE</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>100</i> %			
<b>WATER QUALITY</b>	TEMPERATURE	-	<b>WATER ODORS</b>	
	SPEC. CONDUCTANCE	-	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY	-	<b>WATER SURFACE OILS</b>	
	WQ INSTRUMENT USED	-	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
		<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS	
		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER	
		<b>TURBIDITY (IF NOT MEASURED)</b>		
		<input checked="" type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID	
		<input type="checkbox"/> TURBID	<input type="checkbox"/> OPAQUE	
		<input type="checkbox"/> STAINED	<input type="checkbox"/> OTHER	
<b>SEDIMENT/SUBSTRATE</b>	<b>ODORS</b>		<b>DEPOSITS</b>	
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS	
<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER		
<b>OILS</b>		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>		
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE			

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~50</i>
BOULDER	256 MM (10"+)	<i>25</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>20</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>25</i>			
SILT	0.004 - 0.06 MM	<i>^</i>	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY TUNNEL			07.16.12	S.SRC-45	

Name(s) of Evaluator(s)	Stream Name and Information
SRC, KLF	S.SRC-45

**1. RIPARIAN VEGETATION:** Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along the floodplain using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian Area and Score for each category in the blocks below.										
Ensure the sums of % Riparian Blocks equal 100										
Right Side	% Riparian Area >	1.00							1.00 0%	
	Score >	18							18	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area >	1.00							1.00 0%	Rt Sub-Index > 1.90 0.00
	Score >	18							18	Lt Sub-Index > 1.90 0.00
CI										

0.90

**2. RIPARIAN ZONE OF INFLUENCE:** Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.										
Ensure the sums of % Riparian ZOI Blocks equal 100										
Right Side	% Riparian Area >	1.00							1.00 0%	
	Score >	18							18	
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area >	1.00							1.00 0%	Rt Sub-Index > 1.90 0.00
	Score >	18							18	Lt Sub-Index > 1.90 0.00
CI										

0.90

Comments:  
 ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.00
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2		0.90

0.90



**S-SRC-45 overview, facing upstream.**



**S-SRC-45 overview, facing downstream.**

**STREAM S-SRC-46**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-46	CLIENT	PTC
STREAM CLASS	INTERMITTENT	PROJECT	Allegheny Tunnel
INVESTIGATORS	SRLC RLC	DATE	07.16.12
		TIME	11:32
LATITUDE		LONGITUDE	
STATION #	-	RIVERMILE	-
		MM/DD/YR	
		24 HOUR (I.E. 16:45)	
		LOCATION	Somerset County, PA
		RIVER BASIN	RAYSTOWN BR., JUNIATA R.
		STORET #	-

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO  AIR TEMPERATURE <span style="font-size: 1.2em;">80</span> °F  OTHER	
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input checked="" type="checkbox"/>
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input checked="" type="checkbox"/>
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>
	<input checked="" type="checkbox"/>	75 % CLOUD COVER		50 <input checked="" type="checkbox"/>
<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>		

SITE LOCATION MAP

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00	FT.
			VERTICAL (B)	1.00	FT.
		LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.
			VERTICAL (D)	1.00	FT.
		CHANNEL DIMENSIONS	TOP WIDTH (E)	4.00	FT.
			BOTTOM WIDTH (F)	2.00	FT.
			OVERALL DEPTH (G)	1.00	FT.
			ORDINARY HIGH WATER MARK (H)	0.50	FT.
			FLOW DEPTH (I)	0.00	FT.
			APPROX. SURFACE VELOCITY	0.00	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM <input type="checkbox"/> PERENNIAL <input checked="" type="checkbox"/> INTERMITTENT <input type="checkbox"/> EPHEMERAL <input type="checkbox"/> TIDAL	STREAM TYPE <input type="checkbox"/> COLD WATER <input checked="" type="checkbox"/> WARM WATER CATCHMENT AREA _____ SQ. MI.
	STREAM ORIGIN <input type="checkbox"/> GLACIAL <input type="checkbox"/> NON-GLACIAL MONTANE <input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> SPRING FED <input checked="" type="checkbox"/> MIXTURE OF ORIGINS <input checked="" type="checkbox"/> OTHER <u>STORMWATER</u>

STREAM ID: 9-520-46

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

<b>WATERSHED FEATURES</b>	<b>PREDOMINANT SURROUNDING LANDUSE</b>		<b>LOCAL WATERSHED NPS POLLUTION</b>	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
<b>RIPARIAN VEG. (18 M. BUFFER)</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>			
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <u>SUGAR MAPLE, WITCH HAZEL, JEWEL WOOD</u>			
<b>INSTREAM FEATURES</b>	STUDY LENGTH	<u>2300</u> FT.	<b>CANOPY COVER</b>	
	STREAM WIDTH	<u>4.00</u> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN
	STUDY REACH AREA	- AC.	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
	EST. DRAINAGE AREA	- SQ. MI.	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b>	
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> RUN
	TAXA PRESENT	-	<input type="checkbox"/> POOL	<input type="checkbox"/> CHANNELIZED
<b>LARGE WOODY DEBRIS</b>	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
<b>AQUATIC VEGETATION</b>	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b>			
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT <u>S P A G N U M moss, Jewel wood</u> PORTION OF THE REACH WITH AQUATIC VEGETATION <u>60</u> %			
<b>WATER QUALITY</b>	TEMPERATURE	- °C	<b>WATER ODORS</b>	
	SPEC. CONDUCTANCE	-	<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY	-	<b>WATER SURFACE OILS</b>	
	WQ INSTRUMENT USED	-	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
			<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
			<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER
			<b>TURBIDITY (IF NOT MEASURED)</b>	
			<input type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID
			<input type="checkbox"/> TURBID	<input type="checkbox"/> OPAQUE
			<input type="checkbox"/> STAINED	<input type="checkbox"/> OTHER
<b>SEDIMENT/SUBSTRATE</b>	<b>ODORS</b>		<b>DEPOSITS</b>	
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> OTHER	<input type="checkbox"/> ANAEROBIC <input type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL	<input type="checkbox"/> SLUDGE <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	<input type="checkbox"/> SAWDUST <input type="checkbox"/> SAND
	<b>OILS</b>		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b>	
	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> MODERATE	<input type="checkbox"/> SLIGHT <input type="checkbox"/> PROFUSE	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~50
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")	40			
SAND	0.06 - 0.2 MM (GRITTY)	15			
SILT	0.004 - 0.06 MM	-	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A15	PTC ALLEGHENY TUNNEL			07.16.12	S.SRC.46	

Name(s) of Evaluator(s)	Stream Name and Information
SAC, RW	S.SRC.46 UNT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseites, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along the floodplain using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian Area and Score for each category in the blocks below.										
Ensure the sums of % Riparian Blocks equal 100										
Right Side	% Riparian Area >	1.00							100%	
	Score >	18							18	
Left Side	% Riparian Area >	1.00							100%	
	Score >	18							18	
CI = Sum (Rt and Lt sub-Indexes)/2										
CI										
0.40										

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseites, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.										
2. Estimate the % area within each condition category. Calculators are provided for you below.										
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.										
Ensure the sums of % Riparian ZOI Blocks equal 100										
Right Side	% Riparian Area >	1.00							100%	
	Score >	18							18	
Left Side	% Riparian Area >	1.00							100%	
	Score >	18							18	
CI = Sum (Rt and Lt sub-Indexes)/2										
CI										
0.90										

Comments:  
ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.40
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.90
RECI = (Sum of CI's)/2		



**S-SRC-46 overview, facing upstream.**



**S-SRC-46 overview, facing downstream.**

**STREAM S-SRC-47**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-47			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLC	DATE	07.16.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	11:37			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JUNIATA L.	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input checked="" type="checkbox"/>	AIR TEMPERATURE <u>80</u> °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input checked="" type="checkbox"/>		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>	OTHER	
	<input checked="" type="checkbox"/>	<u>75</u> % CLOUD COVER	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>			

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

Route to S-SAC-46.

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center; vertical-align: middle;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td style="text-align: center;">2.50</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td style="text-align: center;">1.50</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td style="text-align: center;">1.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td style="text-align: center;">0.50</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td style="text-align: center;">0.00</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td style="text-align: center;">0.00</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.	VERTICAL (B)	1.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.	VERTICAL (D)	1.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	2.50	FT.	BOTTOM WIDTH (F)	1.50	FT.	OVERALL DEPTH (G)	1.00	FT.	ORDINARY HIGH WATER MARK (H)	0.50	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		1.00	FT.																														
	VERTICAL (B)	1.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.																															
	VERTICAL (D)	1.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	2.50	FT.																															
	BOTTOM WIDTH (F)	1.50	FT.																															
	OVERALL DEPTH (G)	1.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.50	FT.																															
	FLOW DEPTH (I)	0.00	FT.																															
	APPROX. SURFACE VELOCITY	0.00	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER <u>570.2M WIDTH</u>	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: *S-SRC-47*

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES <input checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>SUGAR MAPLE, WHITE HERC, JEWEL WOOD</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>100</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>2.50</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED
LARGE WOODY DEBRIS	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT <i>SPAGNUM MOSS, JEWEL WOOD</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>100</i> %			
WATER QUALITY	TEMPERATURE	-	°C	
	SPEC. CONDUCTANCE	-	WATER ODORS	
SEDIMENT/SUBSTRATE	DISSOLVED OXYGEN	-	<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	pH	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)	TURBIDITY	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	WQ INSTRUMENT USED	-	WATER SURFACE OILS	
ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)	ODORS	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER	<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input type="checkbox"/> NONE <input type="checkbox"/> OTHER	
	OILS	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE	TURBIDITY (IF NOT MEASURED) <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	
		DEPOSITS		
		<input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input checked="" type="checkbox"/> OTHER	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~ 75
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	30	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	40			
SAND	0.06 - 0.2 MM (GRITTY)	30			
SILT	0.004 - 0.06 MM	-	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A15	PT ALLEGHENY TUNNEL			07.16.12	S.S.RC.47	

Name(s) of Evaluator(s)	Stream Name and Information
S.R.C., K.L.O.	S.S.RC.47 UNT TO RAYSTOWN BR., JEWETTA R.

**1. RIPARIAN VEGETATION:** Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100																							
Right Side	% Riparian Area>	1.00																			100.0%				
	Score >	18																			18	CI = Sum (Rt and Lt sub-Indexes)/2			
Left Side	% Riparian Area>	1.00																			100.0%	Rt Sub-Index>	0.90	CI	0.90
	Score >	18																			18	Lt Sub-Index>	0.90		0.00

**2. RIPARIAN ZONE OF INFLUENCE:** Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category																NOTES>>										
	Optimal				Suboptimal				Marginal				Poor														
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.				High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.					Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.	
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							

1. Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100																							
Right Side	% Riparian Area>	1.00																			100.0%				
	Score >	18																			18	CI = Sum (Rt and Lt sub-Indexes)/2			
Left Side	% Riparian Area>	1.00																			100.0%	Rt Sub-Index>	0.90	CI	0.90
	Score >	18																			18	Lt Sub-Index>	0.90		0.00

Comments:  
 ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2		0.90



**S-SRC-47 overview, facing upstream.**



**S-SRC-47 overview, facing downstream.**

**STREAM S-SRC-48**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-48			CLIENT	PTC
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel
INVESTIGATORS	SAC KLE	DATE	07.16.12	MM/DD/YR	LOCATION
		TIME	12:55	24 HOUR (I.E. 16:45)	
LATITUDE		LONGITUDE		RIVER BASIN	RT45TOWN BL., JUNESTON
STATION #	-	RIVERMILE	-	STORET #	-

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input checked="" type="checkbox"/>		AIR TEMPERATURE		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input checked="" type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		62	°F	
	<input checked="" type="checkbox"/>	100	% CLOUD COVER	50	<input checked="" type="checkbox"/>	OTHER	
<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>				

SITE LOCATION MAP	<p style="text-align: center;">PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)</p>
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<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;">RIGHT BANK (FACE DOWNSTREAM)</td> <td style="text-align: center;">HORIZONTAL (A)</td> <td style="text-align: center;">4.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (B)</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;">LEFT BANK (FACE DOWNSTREAM)</td> <td style="text-align: center;">HORIZONTAL (C)</td> <td style="text-align: center;">4.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (D)</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center; vertical-align: middle;">CHANNEL DIMENSIONS</td> <td style="text-align: center;">TOP WIDTH (E)</td> <td style="text-align: center;">10.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">BOTTOM WIDTH (F)</td> <td style="text-align: center;">6.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">OVERALL DEPTH (G)</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">ORDINARY HIGH WATER MARK (H)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">FLOW DEPTH (I)</td> <td style="text-align: center;">20.25</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">APPROX. SURFACE VELOCITY</td> <td style="text-align: center;">25.00</td> <td style="text-align: center;">FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	4.00	FT.	VERTICAL (B)	3.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	4.00	FT.	VERTICAL (D)	3.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	10.00	FT.	BOTTOM WIDTH (F)	6.00	FT.	OVERALL DEPTH (G)	3.00	FT.	ORDINARY HIGH WATER MARK (H)	1.00	FT.	FLOW DEPTH (I)	20.25	FT.	APPROX. SURFACE VELOCITY	25.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		4.00	FT.																														
	VERTICAL (B)	3.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	4.00	FT.																															
	VERTICAL (D)	3.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	10.00	FT.																															
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	OVERALL DEPTH (G)	3.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	1.00	FT.																															
	FLOW DEPTH (I)	20.25	FT.																															
	APPROX. SURFACE VELOCITY	25.00	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input checked="" type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
STREAM ORIGIN		OTHER		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/>	SPRING FED	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input checked="" type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input checked="" type="checkbox"/>	OTHER	
		SODIUM WATER		

STREAM ID: *S-SAC-48*

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

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"/> OTHER <input type="checkbox"/> RESIDENTIAL		LOCAL WATERSHED NPS POLLUTION <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES		
			LOCAL WATERSHED EROSION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY		
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>BASSWOOD, SUGAR MAPLE, ASH</i>				
INSTREAM FEATURES	STUDY LENGTH	<i>~300</i>	FT.	CANOPY COVER	
	STREAM WIDTH	<i>10.00</i>	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN
	STUDY REACH AREA	<i>-</i>	AC.	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES <input checked="" type="checkbox"/> RIFFLE <i>25</i> % <input type="checkbox"/> RUN <i>      </i> % <input type="checkbox"/> POOL		
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	CHANNELIZED	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
TAXA PRESENT	<i>CADDIS, STONEFLY</i>		DAM PRESENT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. <sup>2</sup>		
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>		
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING				
	DOMINANT SPECIES PRESENT <i>SPAGNUM MOSS, JEWEL WARD</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>25</i> %				
WATER QUALITY	TEMPERATURE	<i>      </i>	°C	WATER ODORS <input checked="" type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
	SPEC. CONDUCTANCE	<i>      </i>		WATER SURFACE OILS <input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input checked="" type="checkbox"/> NONE <input type="checkbox"/> OTHER	
	DISSOLVED OXYGEN	<i>      </i>		TURBIDITY (IF NOT MEASURED) <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	
	pH	<i>      </i>			
	TURBIDITY	<i>      </i>			
WQ INSTRUMENT USED	<i>      </i>				
SEDIMENT/SUBSTRATE	ODORS <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		DEPOSITS <input type="checkbox"/> SLUDGE <input checked="" type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input checked="" type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER		
	OILS <input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>5</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~40</i>
BOULDER	256 MM (10"+)	<i>40</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>~2</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>15</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM		MARL	GREY, SHELL FRAGMENTS	<i>—</i>
CLAY	<0.004 MM (SLICK)				

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0  
For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A11J	PTC ALLEGANY TUNNEL			07.16.12	S. SAC. 48	
Name(s) of Evaluator(s)		Stream Name and Information				
SAC, KEE		S. SAC. 48 UNF TO RAYSTOWN BR., JUNIATA R.				

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100																		
Right Side	% Riparian Area>	1.00																		
	Score >	18																		
		CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area>	1.00																		
	Score >	18																		
		Rt Sub-Index> 0.500000																		
		Lt Sub-Index> 0.900000																		
		CI 0.90																		

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>											
	Optimal		Suboptimal		Marginal		Poor													
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.		High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.												
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100																		
Right Side	% Riparian Area>	1.00																		
	Score >	18																		
		CI = Sum (Rt and Lt sub-Indexes)/2																		
Left Side	% Riparian Area>	1.00																		
	Score >	18																		
		Rt Sub-Index> 0.900000																		
		Lt Sub-Index> 0.900000																		
		CI 0.90																		

Comments:

ZOI CONSISTS OF MATURE, DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.90
RECI = (Sum of CI's)/2		



**S-SRC-48 overview, facing upstream.**



**S-SRC-48 overview, facing downstream.**

**STREAM S-SRC-49**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S- SRC-49		CLIENT		PTC	
STREAM CLASS		EPHEMERAL		PROJECT		Allegheny Tunnel	
INVESTIGATORS	SAC	DATE	07.16.12	MM/DD/YR	LOCATION	Somerset County, PA	
	ILL	TIME	13:20	24 HOUR (I.E. 16:45)			
LATITUDE		LONGITUDE		RIVER BASIN		RAUSTOWN BR., JUNCTION R.	
STATION #		RIVERMILE		STORET #			

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input checked="" type="checkbox"/>	AIR TEMPERATURE		85 °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input checked="" type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>	OTHER			
<input checked="" type="checkbox"/>	25	% CLOUD COVER	50					
	<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>				

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)		HORIZONTAL (A)	2.00	FT.		
		LEFT BANK (FACE DOWNSTREAM)		HORIZONTAL (C)	2.00	FT.		
				VERTICAL (D)	0.50	FT.		
<b>CHANNEL DIMENSIONS</b>				TOP WIDTH (E)	3.00	FT.		
				BOTTOM WIDTH (F)	1.50	FT.		
						OVERALL DEPTH (G)	0.50	FT.
						ORDINARY HIGH WATER MARK (H)	0.75	FT.
						FLOW DEPTH (I)	0.00	FT.
						APPROX. SURFACE VELOCITY	0.00	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input checked="" type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
STREAM ORIGIN		OTHER: <u>STORM WATER</u>		
<input type="checkbox"/> GLACIAL		<input type="checkbox"/> SPRING FED		
<input type="checkbox"/> NON-GLACIAL MONTANE		<input type="checkbox"/> MIXTURE OF ORIGINS		
<input type="checkbox"/> SWAMP AND BOG		<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SRC-49

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION		
	<input checked="" type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> NO EVIDENCE	<input type="checkbox"/> SOME POTENTIAL SOURCES	
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES		
	<input type="checkbox"/> AGRICULTURAL	<input type="checkbox"/> OTHER	LOCAL WATERSHED EROSION		
	<input type="checkbox"/> RESIDENTIAL		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT				
	<input checked="" type="checkbox"/> TREES	<input type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input type="checkbox"/> HERBACEOUS	
	DOMINANT SPECIES PRESENT? <i>BASSWOOD, SUGAR MAPLE, ASH</i>				
INSTREAM FEATURES	STUDY LENGTH	<i>2900</i>	FT.	CANOPY COVER	
	STREAM WIDTH	<i>3.00</i>	FT.	<input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STUDY REACH AREA	<i>-</i>	AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	<input type="checkbox"/> RIFFLE <input type="checkbox"/> RUN	%
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> POOL	%
	TAXA PRESENT	<i>-</i>	CHANNELIZED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
	DAM PRESENT	<i>-</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. <sup>2</sup>		
	DENSITY OF LWD	<i>-</i>	FT. <sup>2</sup> /MI. <sup>2</sup>		
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT				
	<input checked="" type="checkbox"/> ROOTED EMERGENT	<input type="checkbox"/> ROOTED SUBMERGENT	<input type="checkbox"/> ROOTED FLOATING		
	<input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ATTACHED ALGAE	<input type="checkbox"/> FREE FLOATING		
	DOMINANT SPECIES PRESENT <i>Flume weed</i>				
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>25</i> %				
WATER QUALITY	TEMPERATURE	<i>-</i>	°C	WATER ODORS	
	SPEC. CONDUCTANCE	<i>-</i>		<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	<i>-</i>		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	<i>-</i>		<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY	<i>-</i>		WATER SURFACE OILS	
				<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
				<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
				<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER
	WQ INSTRUMENT USED	<i>-</i>	TURBIDITY (IF NOT MEASURED)		
			<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	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS		
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST	
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND	
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS		
	<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER		
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
	<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE			

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>5</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>265</i>
BOULDER	256 MM (10"+)	<i>15</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>25</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>7</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>35</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>10</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
CLAY	<0.004 MM (SLICK)	<i>-</i>			





**S-SRC-49 overview, facing upstream.**



**S-SRC-49 overview, facing downstream.**

**STREAM S-SRC-50**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-50			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC KLV	DATE	01.11.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	13:57			
LATITUDE		LONGITUDE		RIVER BASIN	RHYSTOWN BR., JURYSTATA R.	
STATION #		RIVERMILE		STORET #		

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input checked="" type="checkbox"/>		AIR TEMPERATURE	85 °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input checked="" type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>		OTHER		
<input checked="" type="checkbox"/>	90	% CLOUD COVER	50	<input checked="" type="checkbox"/>				
<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>					

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

④ TR114-02

S-SRC-50

UPLAND DECEDUOUS

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.
			VERTICAL (B)	0.75
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	FT.
		VERTICAL (D)	0.75	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	2.00	FT.
		BOTTOM WIDTH (F)	1.00	FT.
		OVERALL DEPTH (G)	0.75	FT.
		ORDINARY HIGH WATER MARK (H)	0.50	FT.
		FLOW DEPTH (I)	0.00	FT.
		APPROX. SURFACE VELOCITY	0.00	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input checked="" type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input type="checkbox"/> SPRING FED	STORM WATER	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: *S-SAC-50*

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

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"/> OTHER <input type="checkbox"/> RESIDENTIAL		LOCAL WATERSHED NPS POLLUTION <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES LOCAL WATERSHED EROSION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
	RIPARIAN VEG. (18 M. BUFFER) INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT <input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>ASH, SL. CHERRY, SOLIDAGO</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>2300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>2.00</i> FT.	<input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input checked="" type="checkbox"/> PARTLY SHADED <input type="checkbox"/> SHADED	
	STUDY REACH AREA	— AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	— SQ. MI.	<input type="checkbox"/> RIFFLE      % <input type="checkbox"/> RUN      %	
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL      %	
	TAXA PRESENT	—	CHANNELIZED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
			DAM PRESENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	—	FT. <sup>2</sup>	
	DENSITY OF LWD	—	FT. <sup>2</sup> /MI. <sup>2</sup>	
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"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE-FLOATING			
	DOMINANT SPECIES PRESENT PORTION OF THE REACH WITH AQUATIC VEGETATION      %			
WATER QUALITY	TEMPERATURE	— °C	WATER ODORS	
	SPEC. CONDUCTANCE	—	<input type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE	
	DISSOLVED OXYGEN	—	<input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL	
	pH	—	<input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
	TURBIDITY	—	WATER SURFACE OILS	
	WQ INSTRUMENT USED	—	<input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily	
			<input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS	
			<input type="checkbox"/> NONE <input type="checkbox"/> OTHER	
			TURBIDITY (IF NOT MEASURED)	
			<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	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE	<input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST	<input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND
	<input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS	<input type="checkbox"/> OTHER	
	<input type="checkbox"/> OTHER			
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
	<input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT	<input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	—	—	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~40</i>
BOULDER	256 MM (10"+)	—			
COBBLE	64 - 256 MM (2.5 - 10")	<i>25</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	—
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>30</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>25</i>			
SILT	0.004 - 0.06 MM	<i>20</i>	MARL	GREY, SHELL FRAGMENTS	—
CLAY	<0.004 MM (SLICK)	—			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGHENY CHANNEL			07.16.12	S.SAC.50	

Name(s) of Evaluator(s)	Stream Name and Information
SAC, KLF	S. SAC. 50 UNT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nursefires, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

		Ensure the sums of % Riparian Blocks equal 100							
Right Side	% Riparian Area>	1.00							1.00 0%
	Score >	18							18
CI = Sum (Rt and Lt sub-Indexes)/2									
Left Side	% Riparian Area>	1.00							1.00 0%
	Score >	18							18
	Rt Sub-Index>								0.00
	Lt Sub-Index>								0.00

0.90

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nursefires, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

		Ensure the sums of % Riparian ZOI Blocks equal 100							
Right Side	% Riparian Area>	1.00							1.00 0%
	Score >	18							18
CI = Sum (Rt and Lt sub-Indexes)/2									
Left Side	% Riparian Area>	1.00							1.00 0%
	Score >	18							18
	Rt Sub-Index>								0.00
	Lt Sub-Index>								0.00

0.90

Comments:

ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

### RIPARIAN ECOTONE CONDITION INDEX

NOTE: The CIs and RECI should be rounded to 2 decimal places.	THE RIPARIAN ECOTONE CONDITION INDEX (RECI)	RECI
	RECI = (Sum of CI's)/2	0.00

0.90



**S-SRC-50 overview, facing upstream.**



**S-SRC-50 overview, facing downstream.**

**STREAM S-SRC-51**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SRC-S1		CLIENT		PTC	
STREAM CLASS		Ephemeral		PROJECT		Allegheny Tunnel	
INVESTIGATORS	SRC KLE	DATE	7.16.12	MM/DD/YR	LOCATION	Somerset County, PA	
		TIME	14:53	24 HOUR (I.E. 16:45)			
LATITUDE		LONGITUDE		RIVER BASIN		Raystown Br, Juniata R.	
STATION #		RIVERMILE		STORET #		-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
	<input type="checkbox"/>	STORM (HEAVY RAIN)		<input checked="" type="checkbox"/>	AIR TEMPERATURE		
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input checked="" type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>	OTHER		
	<input checked="" type="checkbox"/>	90	% CLOUD COVER	50			
<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>				

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)		HORIZONTAL (A)	1.0	FT.
		LEFT BANK (FACE DOWNSTREAM)		HORIZONTAL (C)	1.0	FT.
				VERTICAL (B)	0.75	FT.
				VERTICAL (D)	.75	FT.
		CHANNEL DIMENSIONS		TOP WIDTH (E)	2.0	FT.
				BOTTOM WIDTH (F)	1.0	FT.
				OVERALL DEPTH (G)	.75	FT.
				ORDINARY HIGH WATER MARK (H)	.5	FT.
				FLOW DEPTH (I)	0	FT.
				APPROX. SURFACE VELOCITY	0	FT./SEC

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input checked="" type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER <input checked="" type="checkbox"/> 5 to 1 mg	
	<input type="checkbox"/> GLACIAL	<input type="checkbox"/> SPRING FED		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID:

S-SEC-51

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	<b>PREDOMINANT SURROUNDING LANDUSE</b> <input checked="" type="checkbox"/> FOREST <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> OTHER <input type="checkbox"/> RESIDENTIAL		<b>LOCAL WATERSHED NPS POLLUTION</b> <input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES <b>LOCAL WATERSHED EROSION</b> <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY	
	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <i>Sweet Birch, Sugar Maple, Black Cherry</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~500</i> FT.	<b>CANOPY COVER</b> <input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STREAM WIDTH <i>20</i> FT. STUDY REACH AREA <i>—</i> AC. EST. DRAINAGE AREA <i>—</i> SQ. MI. MACROINVERTEBRATES PRESENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO TAXA PRESENT	<b>PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES</b> <input type="checkbox"/> RIFFLE <input type="checkbox"/> RUN <input type="checkbox"/> POOL <input type="checkbox"/> CHANNELIZED <input type="checkbox"/> DAM PRESENT <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
LARGE WOODY DEBRIS	LWD	<i>—</i>	FT. <sup>2</sup>	
	DENSITY OF LWD	<i>—</i>	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	<b>INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT</b> <input type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING			
	DOMINANT SPECIES PRESENT PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
WATER QUALITY	TEMPERATURE	_____ °C	<b>WATER ODORS</b> <input type="checkbox"/> NORMAL/NONE <input type="checkbox"/> SEWAGE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> FISHY <input type="checkbox"/> OTHER	
	SPEC. CONDUCTANCE DISSOLVED OXYGEN pH TURBIDITY  WQ INSTRUMENT USED	<b>WATER SURFACE OILS</b> <input type="checkbox"/> SLICK <input type="checkbox"/> SHEEN - Oily <input type="checkbox"/> GLOBS <input type="checkbox"/> FLECKS <input type="checkbox"/> NONE <input type="checkbox"/> OTHER <b>TURBIDITY (IF NOT MEASURED)</b> <input type="checkbox"/> CLEAR <input type="checkbox"/> SLIGHTLY TURBID <input type="checkbox"/> TURBID <input type="checkbox"/> OPAQUE <input type="checkbox"/> STAINED <input type="checkbox"/> OTHER		
SEDIMENT/SUBSTRATE	<b>ODORS</b> <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> ANAEROBIC <input type="checkbox"/> SEWAGE <input type="checkbox"/> NONE <input type="checkbox"/> PETROLEUM <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		<b>DEPOSITS</b> <input type="checkbox"/> SLUDGE <input type="checkbox"/> SAWDUST <input type="checkbox"/> PAPER FIBER <input type="checkbox"/> SAND <input type="checkbox"/> RELICT SHELLS <input type="checkbox"/> OTHER	
	<b>OILS</b> <input checked="" type="checkbox"/> ABSENT <input type="checkbox"/> SLIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> PROFUSE		<b>UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<i>20</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~60</i>
BOULDER	256 MM (10"+)	<i>30</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>—</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>10</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>—</i>	MARL	GREY, SHELL FRAGMENTS	<i>—</i>
SILT	0.004 - 0.06 MM	<i>10</i>			
CLAY	<0.004 MM (SLICK)	<i>—</i>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as Intermittent or Perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTE ALLEGHENY TUNNEL			07.16.12	S. SRC. 51	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLE		S. SRC. 51 UNT TO RAYSTOWN BR., JUNIATA R.				

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

Right Side	% Riparian Area>	1.00							1.00 0%	
	Score >	18							18	
Left Side	% Riparian Area>	1.00							1.00 0%	CI
	Score >	18							18	0.90

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
	High	Low	High	Low	High	Low			
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

Right Side	% Riparian Area>	1.00							1.00 0%	
	Score >	18							18	
Left Side	% Riparian Area>	1.00							1.00 0%	CI
	Score >	18							18	0.90

Comments:  
ZOI CONSISTS OF MATURE, UPLAND DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.90
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.90
RECI = (Sum of CI's)/2		



**S-SRC-51 overview, facing upstream.**



**S-SRC-51 overview, facing downstream.**

**STREAM S-SRC-52**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-52			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC	DATE	07.17.12	LOCATION	Somerset County, PA	
	ILCE	TIME	10:57			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BL., JENNINGS R.	
STATION #		RIVERMILE		STORET #		

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		AIR TEMPERATURE	80	°F
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input checked="" type="checkbox"/>		OTHER		
<input checked="" type="checkbox"/>	0	% CLOUD COVER	50	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>				

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

The map shows a plan view of the stream crossing. A horizontal line represents the 'DIRT ACCESS ROAD'. Below it, a dashed line indicates the stream 'S-SAC-52'. To the left of the stream, there is a circled 'X' labeled 'WETLAND'. To the right, there is a circled 'N' labeled 'WETLAND'. Arrows indicate 'SLOPE' directions. A north arrow is drawn in the upper right corner.

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> <p><b>CHANNEL TOP WIDTH (E)</b></p> <p><b>CHANNEL DEPTH (G)</b></p> <p><b>FLOW DEPTH (I)</b></p> <p><b>BOTTOM WIDTH (F)</b></p> <p><b>ORDINARY HIGH WATER MARK (H)</b></p> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>5.50</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>1.50</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>0.75</td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td>0.00</td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td>0.00</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.50	FT.	VERTICAL (B)	1.50	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.50	FT.	VERTICAL (D)	1.50	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	5.50	FT.	BOTTOM WIDTH (F)	3.00	FT.	OVERALL DEPTH (G)	1.50	FT.	ORDINARY HIGH WATER MARK (H)	0.75	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		1.50	FT.																														
	VERTICAL (B)	1.50	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.50	FT.																															
	VERTICAL (D)	1.50	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	5.50	FT.																															
	BOTTOM WIDTH (F)	3.00	FT.																															
	OVERALL DEPTH (G)	1.50	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.75	FT.																															
	FLOW DEPTH (I)	0.00	FT.																															
	APPROX. SURFACE VELOCITY	0.00	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input checked="" type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	SUSPENDED RUNOFF	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: 5-SAC-52

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> NO EVIDENCE	<input type="checkbox"/> SOME POTENTIAL SOURCES
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES	
	<input type="checkbox"/> AGRICULTURAL	<input type="checkbox"/> OTHER	LOCAL WATERSHED EROSION	
	<input type="checkbox"/> RESIDENTIAL		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> MODERATE <input type="checkbox"/> HEAVY
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES	<input type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input type="checkbox"/> HERBACEOUS
INSTREAM FEATURES	DOMINANT SPECIES PRESENT? <i>BURR BIRCH, STRIPED MAPLE</i>			
	STUDY LENGTH	<i>7.50</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>5.50</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	- AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	- SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>25</i> %	<input type="checkbox"/> RUN <i>0</i> %
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL <i>0</i> %	<input type="checkbox"/> CHANNELIZED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	-	FT. <sup>2</sup>	
	DENSITY OF LWD	-	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> ROOTED EMERGENT	<input type="checkbox"/> ROOTED SUBMERGENT	<input type="checkbox"/> ROOTED FLOATING	<input type="checkbox"/> FREE FLOATING
	<input type="checkbox"/> FLOATING ALGAE	<input type="checkbox"/> ATTACHED ALGAE		
WATER QUALITY	DOMINANT SPECIES PRESENT <i>SPIROGONIA moss, JEWELWEED</i>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>50</i> %			
	TEMPERATURE	-	WATER ODORS	
	SPEC. CONDUCTANCE	-	<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN	-	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH	-	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
SEDIMENT/SUBSTRATE	WATER SURFACE OILS			
	TURBIDITY	-	<input checked="" type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
	WQ INSTRUMENT USED	-	<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
		-	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER
		-	TURBIDITY (IF NOT MEASURED)	
		-	<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	
ODORS	<input checked="" type="checkbox"/> NORMAL		DEPOSITS	
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST
<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND	
<input type="checkbox"/> OTHER	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS		
OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE			

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~40</i>
BOULDER	256 MM (10"+)	<i>10</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>30</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>30</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>20</i>	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A11J	PTC ALLEGANY TUNNEL			07.17.12	S-SAC-52	

Name(s) of Evaluator(s)	Stream Name and Information
SAC, KLE	S-SAC-52 UNT TO RAYSTOWN BR., JUNEFATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Scores	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

Right Side	% Riparian Area>	1.00							100%	
	Score >	17							7	
Left Side	% Riparian Area>	1.00							100%	Rt Sub-Index> 0.85 0.00
	Score >	17							17	Lt Sub-Index> 0.85 0.00

0.85

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category								NOTES>>
	Optimal		Suboptimal		Marginal		Poor		
	Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory	Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).	High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.	Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.	High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.	Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.		
Score	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1					

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

Right Side	% Riparian Area>	1.00							100%	
	Score >	17							17	
Left Side	% Riparian Area>	1.00							100%	Rt Sub-Index> 0.85 0.00
	Score >	17							17	Lt Sub-Index> 0.85 0.00

0.85

Comments:

ZOI CONSISTS OF UPLAND, DECIDUOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.85
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.85
RECI = (Sum of CI's)/2		



**S-SRC-52 overview, facing upstream.**



**S-SRC-52 overview, facing downstream.**

**STREAM S-SRC-53**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SAC 53		CLIENT	PTC
STREAM CLASS		INTERMITTENT		PROJECT	Allegheny Tunnel
INVESTIGATORS	SAC	DATE	07.17.12	LOCATION	Somerset County, PA
	ILL	TIME	11:05		
LATITUDE		LONGITUDE		RIVER BASIN	Rausstown Br., JUNIOR R.
STATION #		RIVERMILE		STORET #	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>			AIR TEMPERATURE	80 °F	OTHER
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>					
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input checked="" type="checkbox"/>					
<input checked="" type="checkbox"/>	0	% CLOUD COVER	50	<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>					

**SITE LOCATION MAP**

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

REFER TO S-SAC 52 FOR FOLD SKETCH

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	0.50	FT.
			VERTICAL (B)	1.00
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.
		VERTICAL (D)	1.00	FT.
CHANNEL DIMENSIONS	TOP WIDTH (E)	3.00	FT.	
	BOTTOM WIDTH (F)	1.50	FT.	
	OVERALL DEPTH (G)	1.00	FT.	
	ORDINARY HIGH WATER MARK (H)	0.50	FT.	
	FLOW DEPTH (I)	0.00	FT.	
	APPROX. SURFACE VELOCITY	0.00	FT./SEC	

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
	STREAM ORIGIN		OTHER	
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED	SURFACE RUNOFF	
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER		

STREAM ID: S-SAC-53

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET**

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input checked="" type="checkbox"/> FOREST <input type="checkbox"/> FIELD/PASTURE <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> NO EVIDENCE <input type="checkbox"/> OBVIOUS SOURCES	<input type="checkbox"/> SOME POTENTIAL SOURCES
RIPARIAN VEG. (18 M. BUFFER)	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> TREES <input type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input checked="" type="checkbox"/> HERBACEOUS DOMINANT SPECIES PRESENT? <u>BASSWOOD, HICKORY, JEWELWEED</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>400</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>3.00</u> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <u>10</u> %	<input type="checkbox"/> RUN   _____ %
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL   _____ %	<input type="checkbox"/> CHANNELIZED <input type="checkbox"/> DAM PRESENT
	TAXA PRESENT	<u>—</u>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
LARGE WOODY DEBRIS	LWD	<u>—</u>	FT. <sup>2</sup>	
	DENSITY OF LWD	<u>—</u>	FT. <sup>2</sup> /MI. <sup>2</sup>	
AQUATIC VEGETATION	INDICATE THE DOMINANT TYPE AND RECORD THE DOMINANT SPECIES PRESENT			
	<input checked="" type="checkbox"/> ROOTED EMERGENT <input type="checkbox"/> ROOTED SUBMERGENT <input type="checkbox"/> ROOTED FLOATING <input type="checkbox"/> FLOATING ALGAE <input type="checkbox"/> ATTACHED ALGAE <input type="checkbox"/> FREE FLOATING DOMINANT SPECIES PRESENT <u>SPAGNUM MOSS, JEWELWEED</u>			
WATER QUALITY	PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
	TEMPERATURE	° C	WATER ODORS	
	SPEC. CONDUCTANCE		<input checked="" type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
	DISSOLVED OXYGEN		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH		<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
	TURBIDITY		WATER SURFACE OILS	
		<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily	
		<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS	
		<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> OTHER	
	WQ INSTRUMENT USED	TURBIDITY (IF NOT MEASURED)		
		<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	
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS	
	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> SLUDGE	<input type="checkbox"/> SAWDUST
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND
<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS		
<input type="checkbox"/> OTHER		<input type="checkbox"/> OTHER		
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	<input type="checkbox"/> MODERATE	<input type="checkbox"/> PROFUSE		

INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)			ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)		
SUBSTRATE TYPE	DIAMETER	% COMPOSITION IN SAMPLING REACH	SUBSTRATE TYPE	CHARACTERISTIC	% COMPOSITION IN SAMPLING REACH
BEDROCK	-	<u>5</u>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<u>25</u>
BOULDER	256 MM (10"+)	<u>10</u>			
COBBLE	64 - 256 MM (2.5 - 10")	<u>30</u>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<u>—</u>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<u>20</u>			
SAND	0.06 - 0.2 MM (GRITTY)	<u>30</u>			
SILT	0.004 - 0.06 MM	<u>5</u>	MARL	GREY, SHELL FRAGMENTS	<u>—</u>
CLAY	<0.004 MM (SLICK)	<u>—</u>			

# Riverine Assessment Form

Pennsylvania Riverine Condition Level 1 Rapid Assessment Version 1.0

For use in Wadeable channels classified as intermittent or perennial

Project #	Project Name	Locality	HUC	Date	AA #	AA length
A115	PTC ALLEGANY TUNNEL			07.17.12	S.SRC.53	

Name(s) of Evaluator(s)	Stream Name and Information
SRL, KLE	S.SRC.53 UNT TO RAYSTOWN BR., JUNIATA R.

1. RIPARIAN VEGETATION: Assess the floodplain along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian Vegetation (Floodplain)	Conditional Category																NOTES>>							
	Optimal				Suboptimal				Marginal				Poor											
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5		4	3	2	1			
Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.				Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.			
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				

- Identify Condition Category areas along the floodplain using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian Area and Score for each category in the blocks below.

										Ensure the sums of % Riparian Blocks equal 100												
Right Side	% Riparian Area >	100																			100	0%
	Score >	17																			17	
										CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	100																			100	0%
	Score >	17																			17	
										Rt Sub-Index > 0.85 0.00												
										Lt Sub-Index > 0.85 0.00												
										CI 0.85												

2. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 foot from edge of floodplain into the upland along the entire SAR (Visual estimates of areal coverage from aerial photos with field verified acceptable).

Riparian ZOI	Conditional Category																NOTES>>							
	Optimal				Suboptimal				Marginal				Poor											
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5		4	3	2	1			
Tree stratum (dbh > 3 inches) present, with > 60% tree canopy cover. Wetlands and stream channels located within the riparian areas.	High Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: Riparian areas with tree stratum (dbh > 3 inches) present, with 30% to 60% tree canopy cover and a maintained understory. Recent cutover (dense vegetation).				High Marginal: Non-maintained, dense herbaceous vegetation with either a shrub layer or a tree layer (dbh > 3 inches) present, with <30% tree canopy cover.				Low Marginal: Non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, hay production, ponds, open water. If present, tree stratum (dbh > 3 inches) present, with <30% tree canopy cover with maintained understory.				High Poor: Lawns, mowed, and maintained areas, nurseries, no-till cropland, actively grazed pasture, sparsely vegetated non-maintained area, recently seeded and stabilized, or other comparable condition.				Low Poor: Impervious surfaces, mine spoil lands, denuded surfaces, row crops, active feed lots, trails, or other comparable conditions.			
Scores	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				

- Identify Condition Category areas along each side of the Riparian ZOI using the descriptors above.
- Estimate the % area within each condition category. Calculators are provided for you below.
- Enter the % Riparian ZOI Area and Score for each condition category observed in the blocks below.

										Ensure the sums of % Riparian ZOI Blocks equal 100												
Right Side	% Riparian Area >	100																			100	0%
	Score >	17																			17	
										CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	100																			100	0%
	Score >	17																			17	
										Rt Sub-Index > 0.85 0.00												
										Lt Sub-Index > 0.85 0.00												
										CI 0.85												

Comments:

ZOI CONSISTS OF UPLAND, DELTICIOUS FOREST.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.80
THE RIPARIAN ECOTONE CONDITION INDEX (RECI)		0.80
RECI = (Sum of CI's)/2		



**S-SRC-53 overview, facing upstream.**



**S-SRC-53 overview, facing downstream.**

**STREAM S-SRC-54**

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S SAC 51			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	6-17-12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	11:15			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JUVENATA L.	
STATION #		RIVERMILE		STORET #		

WEATHER CONDITIONS	NOW	PAST 24 HOURS	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?			
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/>	STORM (HEAVY RAIN) RAIN (STEADY RAIN)	<input type="checkbox"/>	AIR TEMPERATURE <u>81</u> °F		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	% CLOUD COVER <u>0</u>	<input type="checkbox"/>	OTHER		
<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>				

SITE LOCATION MAP

PROVIDE A PLAN VIEW SKETCH WITH A NORTH ARROW (INDICATE DIRECTIONS OF PHOTOGRAPHS)

REFER TO S-SAC-52 FOR FIELD SKETCH

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="text-align: center;">RIGHT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (A)</td> <td><u>1.50</u></td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td><u>2.00</u></td> <td>FT.</td> </tr> <tr> <td rowspan="2" style="text-align: center;">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td><u>1.50</u></td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td><u>2.00</u></td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td><u>7.00</u></td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td><u>4.00</u></td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td><u>2.00</u></td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td><u>0.75</u></td> <td>FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td><u>0.00</u></td> <td>FT.</td> </tr> <tr> <td>APPROX. SURFACE VELOCITY</td> <td><u>0.00</u></td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	<u>1.50</u>	FT.	VERTICAL (B)	<u>2.00</u>	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	<u>1.50</u>	FT.	VERTICAL (D)	<u>2.00</u>	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	<u>7.00</u>	FT.	BOTTOM WIDTH (F)	<u>4.00</u>	FT.	OVERALL DEPTH (G)	<u>2.00</u>	FT.	ORDINARY HIGH WATER MARK (H)	<u>0.75</u>	FT.	FLOW DEPTH (I)	<u>0.00</u>	FT.	APPROX. SURFACE VELOCITY	<u>0.00</u>	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		<u>1.50</u>	FT.																														
	VERTICAL (B)	<u>2.00</u>	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	<u>1.50</u>	FT.																															
	VERTICAL (D)	<u>2.00</u>	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	<u>7.00</u>	FT.																															
	BOTTOM WIDTH (F)	<u>4.00</u>	FT.																															
	OVERALL DEPTH (G)	<u>2.00</u>	FT.																															
	ORDINARY HIGH WATER MARK (H)	<u>0.75</u>	FT.																															
	FLOW DEPTH (I)	<u>0.00</u>	FT.																															
	APPROX. SURFACE VELOCITY	<u>0.00</u>	FT./SEC																															

STREAM CHARACTERIZATION	STREAM SUBSYSTEM		STREAM TYPE	
	<input type="checkbox"/> PERENNIAL	<input checked="" type="checkbox"/> INTERMITTENT	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER
	<input type="checkbox"/> EPHEMERAL	<input type="checkbox"/> TIDAL	CATCHMENT AREA _____ SQ. MI.	
STREAM ORIGIN		OTHER		
<input type="checkbox"/> GLACIAL	<input type="checkbox"/> NON-GLACIAL MONTANE	<input checked="" type="checkbox"/> SPRING FED	SUREX RUNOFF	
<input type="checkbox"/> SWAMP AND BOG		<input type="checkbox"/> MIXTURE OF ORIGINS		
		<input type="checkbox"/> OTHER		