

STREAM S-SRC-78

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-78			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SNP ILC	DATE	08.07.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	14:30	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	Laystown B.R., JUNIATA	
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 85 °F		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>	OTHER		
	<input checked="" type="checkbox"/>	75 % CLOUD COVER	10			
<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> <p style="text-align: center;">CHANNEL TOP WIDTH (E)</p>	<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>2.00</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>2.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>8.00</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>2.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>1.50</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)	2.00	FT.	VERTICAL (B)	2.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.	VERTICAL (D)	2.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.	BOTTOM WIDTH (F)	4.00	FT.	OVERALL DEPTH (G)	2.00	FT.	ORDINARY HIGH WATER MARK (H)	1.50	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT/SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		2.00	FT.																														
	VERTICAL (B)	2.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.																															
	VERTICAL (D)	2.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.																															
	BOTTOM WIDTH (F)	4.00	FT.																															
	OVERALL DEPTH (G)	2.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	1.50	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 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 STORMWATER	

STREAM ID: S-SLC-78

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 type="checkbox"/> NO EVIDENCE	<input checked="" type="checkbox"/> SOME POTENTIAL SOURCES
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES	
	<input type="checkbox"/> AGRICULTURAL	<input checked="" type="checkbox"/> OTHER	LOCAL WATERSHED EROSION	
	<input type="checkbox"/> RESIDENTIAL	TRANSPORTATION	<input type="checkbox"/> NONE	<input checked="" 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? SUGAR MAPLE, STRIPED MAPLE, CA. VERN			
INSTREAM FEATURES	STUDY LENGTH	~ 300 FT.	CANOPY COVER	
	STREAM WIDTH	8.00 FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input checked="" type="checkbox"/> PARTLY SHADED <input type="checkbox"/> SHADED
	STUDY REACH AREA		PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA		<input type="checkbox"/> RIFFLE	<input type="checkbox"/> RUN
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> POOL	<input type="checkbox"/> CHANNELIZED
TAXA PRESENT			<input type="checkbox"/> DAM PRESENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD		FT. ²	
	DENSITY OF LWD		FT. ² /MI. ²	
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		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"/> 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 checked="" type="checkbox"/> OTHER	HWY DEBRIS / TRASH
	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input 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"+)	5			
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	15	MARL	GREY, SHELL FRAGMENTS	
CLAY	<0.004 MM (SLICK)	10			

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	AT ALLEGHENY TUNNEL			08-07-12	S.SRC.78	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLF		S.SRC.78 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.		
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 >	13							13	
Left Side	% Riparian Area>	1.00							1.00 0%	Rt Sub-Index> 0.65 0.00
	Score >	13							13	Lt Sub-Index> 0.65 0.00

CI = Sum (Rt and Lt sub-Indexes)/2
 CI **0.65**

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 >	13							13	
Left Side	% Riparian Area>	1.00							1.00 0%	Rt Sub-Index> 0.65 0.00
	Score >	13							13	Lt Sub-Index> 0.65 0.00

CI = Sum (Rt and Lt sub-Indexes)/2
 CI **0.65**

Comments:
 ZOI CONSISTS OF SPARSE UPLAND, DECIDUOUS FOREST.

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-78 overview, facing upstream.



S-SRC-78 overview, facing downstream.

STREAM S-SRC-79

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-79			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC ILLC	DATE	08.07.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	14:53			
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 type="checkbox"/>	AIR TEMPERATURE	85 °F		
	<input type="checkbox"/> RAIN (STEADY RAIN)	<input type="checkbox"/>	OTHER			
	<input type="checkbox"/> SHOWERS (INTERMITTENT)	<input type="checkbox"/>				
	<input checked="" type="checkbox"/> 50 % CLOUD COVER	<input checked="" type="checkbox"/> 10				
	<input type="checkbox"/> CLEAR/SUNNY					

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)	0.50	FT.
	VERTICAL (B)	1.25	FT.
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.
	VERTICAL (D)	1.25	FT.
CHANNEL DIMENSIONS	TOP WIDTH (E)	3.50	FT.
	BOTTOM WIDTH (F)	2.50	FT.
	OVERALL DEPTH (G)	1.50	FT.
	ORDINARY HIGH WATER MARK (H)	1.00	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 type="checkbox"/> SPRING FED	STORMWATER	
	<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-79

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 type="checkbox"/> NO EVIDENCE	<input checked="" type="checkbox"/> SOME POTENTIAL SOURCES
	<input checked="" type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES	
	<input type="checkbox"/> AGRICULTURAL	<input checked="" type="checkbox"/> OTHER	LOCAL WATERSHED EROSION	
	<input type="checkbox"/> RESIDENTIAL	TRANSPORTATION	<input type="checkbox"/> NONE	<input checked="" 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 type="checkbox"/> HERBACEOUS
	DOMINANT SPECIES PRESENT? <u>BASSWOOD, CROWN VETCH, GOLDENROD</u>			
INSTREAM FEATURES	STUDY LENGTH	300	FT.	CANOPY COVER
	STREAM WIDTH	3.50	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.	
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> RUN
TAXA PRESENT	<input checked="" type="checkbox"/>		<input type="checkbox"/> POOL	<input type="checkbox"/>
			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. ²	
	DENSITY OF LWD	-	FT. ² /MI. ²	
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
	DISSOLVED OXYGEN			<input type="checkbox"/> PETROLEUM
	pH			<input type="checkbox"/> FISHY
	TURBIDITY			WATER SURFACE OILS
				<input type="checkbox"/> SLICK
				<input type="checkbox"/> GLOBS
			<input type="checkbox"/> NONE	
	WQ INSTRUMENT USED			TURBIDITY (IF NOT MEASURED)
				<input type="checkbox"/> CLEAR
				<input type="checkbox"/> TURBID
				<input type="checkbox"/> STAINED
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 checked="" type="checkbox"/> OTHER	<u>HWY DEBRIS/TRASH</u>
	OILS	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?		
	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	<input type="checkbox"/> YES	<input 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	-	5	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~ 20
BOULDER	256 MM (10"+)	10			
COBBLE	64 - 256 MM (2.5 - 10")	30	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	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
A11J	AT ALLEGHENY TUNNEL			08.0212	S.SRC-79	
Name(s) of Evaluator(s)		Stream Name and Information				
SRL, KLV		S.SRC-79 - 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-til 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								1.00 0%		
	Score >	13								13		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index >	0.00
	Score >	13								13	Lt Sub-Index >	0.00
CI												
0.65												

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-til 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								1.00 0%		
	Score >	13								13		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index >	0.00
	Score >	13								13	Lt Sub-Index >	0.00
CI												
0.65												

Comments:

ZOI INCLUDES SPARSE, UPLAND DECIDUOUS FORESTS

RIPARIAN ECOTONE CONDITION INDEX

NOTE: The CIs and RECI should be rounded to 2 decimal places.	THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CI's)/2	RECI 0.00
		0.65



S-SRC-79 overview, facing upstream.



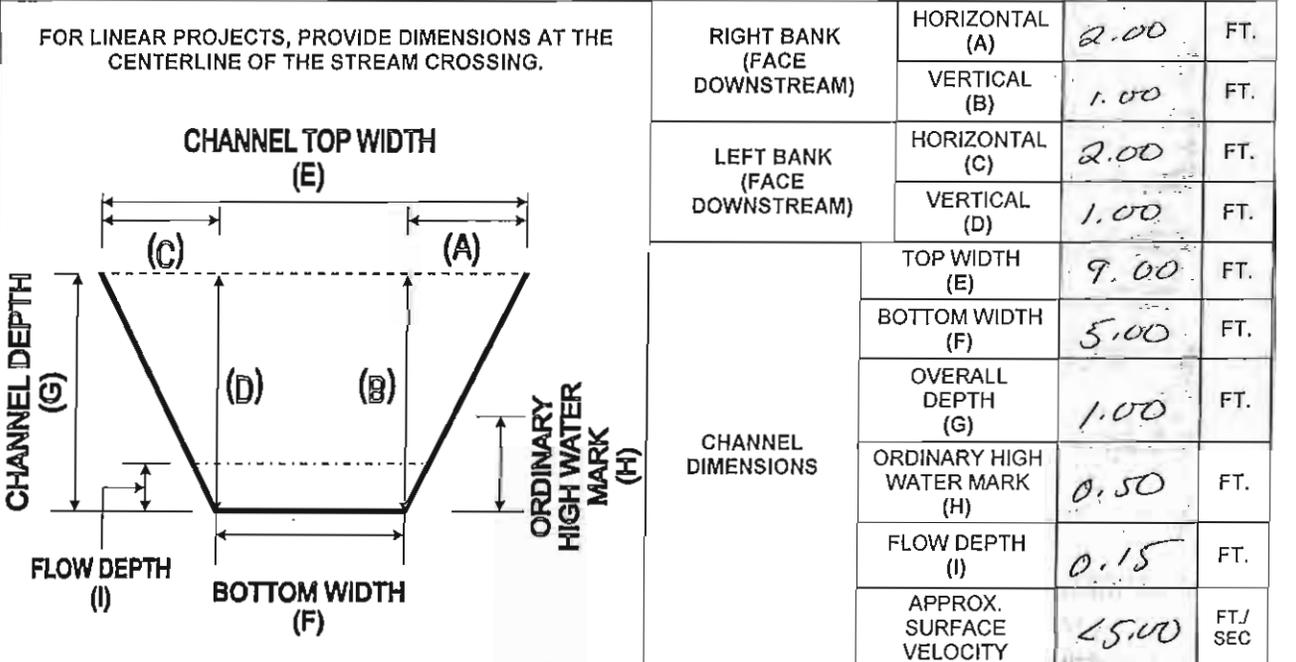
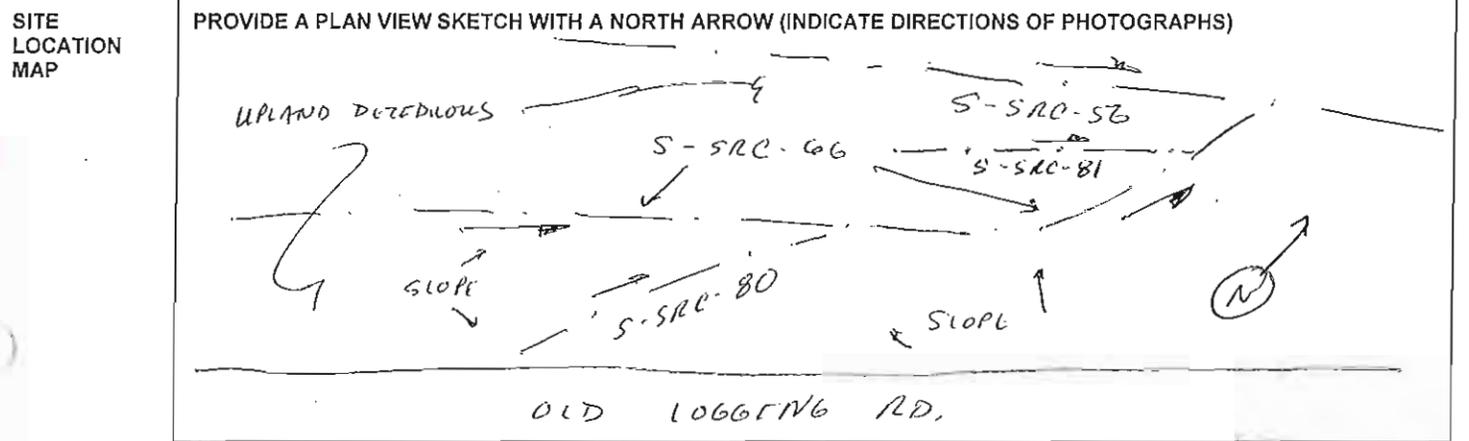
S-SRC-79 overview, facing downstream.

STREAM S-SRC-80

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SRC-80		CLIENT		PTC	
STREAM CLASS		PERENNIAL		PROJECT		Allegheny Tunnel	
INVESTIGATORS	SAC	DATE	08.08.12	MM/DD/YR	LOCATION	Somerset County, PA	
	ILC	TIME	10:05	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 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"/>	0 % CLOUD COVER	<input checked="" type="checkbox"/>	100				
	<input checked="" type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>				



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 type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input type="checkbox"/>	OTHER	

STREAM ID: 5-SRC-80

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>SL. GRM, STRIPED MAPLE, SUGAR MAPLE</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>75</i>	FT.	CANOPY COVER
	STREAM WIDTH	<i>8.00</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		SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>60</i> % <input type="checkbox"/> RUN <input type="checkbox"/> %
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> POOL <i>40</i> %
	TAXA PRESENT	<i>HELODONTA, MUDGOS</i>		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. ²	
	DENSITY OF LWD		FT. ² /MI. ²	
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>CAREX SP., SPAGNUM MOSS</i>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>83</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)	<i>25</i>
BOULDER	256 MM (10"+)	-			
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>10</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>5</i>			
SILT	0.004 - 0.06 MM	<i>55</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 ALLEGHENY TUNNEL			08.08.12	S-SRC-80	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLE		S-SRC-80 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.		
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%
	Score >	15							15
CI = Sum (Rt and Lt sub-Indexes)/2									
Left Side	% Riparian Area>	1.00							1.00%
	Score >	15							15
									0.75
									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							1.00%
	Score >	14							0.70
CI = Sum (Rt and Lt sub-Indexes)/2									
Left Side	% Riparian Area>	1.00							1.00%
	Score >	16							0.80
									0.75
									0.00

Comments:

ZOI CONSISTS OF MATURE DECIDUOUS FOREST W/IN RIPARIAN ZONE OF S-SRC. 56.

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	0.75



S-SRC-80 overview, facing upstream.



S-SRC-80 overview, facing downstream.

STREAM S-SRC-81

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-81			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	08.08.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:15			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JENNETH R.	
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"/>	<input type="checkbox"/>	AIR TEMPERATURE 80 °F	
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OTHER	
<input checked="" type="checkbox"/>	<input type="checkbox"/>			

SITE LOCATION MAP

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

REFER TO S-SRC-80

<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>HORIZONTAL (A)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="2" style="text-align: center;">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td style="text-align: center;">6.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td style="text-align: center;">4.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td style="text-align: center;">0.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>FLOW DEPTH (I)</td> <td style="text-align: center;">0.25</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td>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)	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)	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)	0.25	FT.	APPROX. SURFACE VELOCITY	25.00	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)	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)	0.25	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 ORIGIN		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/>	SPRING FED	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input type="checkbox"/>	OTHER	

STREAM ID: S-580-80

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"/> 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>SL. OLM, STRIPED MAPLE, WITCH HAZEL</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 type="checkbox"/> PARTLY SHADED
	STUDY REACH AREA	<i>-</i>	AC.	<input checked="" type="checkbox"/> SHADED		
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES		
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES		<input checked="" type="checkbox"/> RIFFLE	<i>80</i>	%	<input type="checkbox"/> RUN
TAXA PRESENT	<i>CADDIS, STONEFLEAS</i>		<input checked="" type="checkbox"/> POOL	<i>20</i>	%	
			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	<i>-</i>	FT. ²			
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²			
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		
	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)	<i>~ 15</i>
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	<i>35</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>20</i>			
SILT	0.004 - 0.06 MM	<i>25</i>	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			



S-SRC-81 overview, facing upstream.



S-SRC-81 overview, facing downstream.

STREAM S-SRC-82

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SRC-82		CLIENT	PTC	
STREAM CLASS		PERENNIAL		PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC	DATE	08.08.12	MM/DD/YR	LOCATION Somerset County, PA	
	KLC	TIME	10:54	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 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 type="checkbox"/>		
		% CLOUD COVER	100	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.		CHANNEL TOP WIDTH (E)	
		CHANNEL DIMENSIONS	
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	3.00	FT.
	VERTICAL (B)	2.00	FT.
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.
	VERTICAL (D)	2.00	FT.
		TOP WIDTH (E)	12.00 FT.
		BOTTOM WIDTH (F)	6.00 FT.
		OVERALL DEPTH (G)	2.00 FT.
		ORDINARY HIGH WATER MARK (H)	1.00 FT.
		FLOW DEPTH (I)	0.25 FT.
		APPROX. SURFACE VELOCITY	45.00 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 type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> OTHER		

STREAM ID: S-SRC-82

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? <i>STRIPED MAPLE, SUGAR MAPLE, BIRCH</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>150</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>12.00</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 <i>60</i> %
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> CHANNELIZED	<input type="checkbox"/> DAM PRESENT	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	FT. ²		
	DENSITY OF LWD	FT. ² /MI. ²		
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>CAREX SP., SPAGNUM MOSS, JEWEL WOOD</i>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION			<i>50</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 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 checked="" 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>~25</i>
BOULDER	256 MM (10"+)				
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>30</i>			
SILT	0.004 - 0.06 MM	<i>10</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 ALLEGHENY TURNER			18.08.12	S.SRC-82	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLE		S.SRC-82 UNT TO ATYSTUNN 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		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										1.00	0%				
	Score >	17										17					
		CI = Sum (Rt and Lt sub-Indexes)/2															
Left Side	% Riparian Area>	1.00										1.00	0%	Rt Sub-Index>	0.00	CI	0.00
	Score >	17										17		Lt Sub-Index>	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, 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		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 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 >	17										17					
		CI = Sum (Rt and Lt sub-Indexes)/2															
Left Side	% Riparian Area>	1.00										1.00	0%	Rt Sub-Index>	0.00	CI	0.00
	Score >	17										17		Lt Sub-Index>	0.00		

0.85

Comments:

ZOI IS W/EN MATURE DECIDUOUS RIPARIAN TOWE OF S.SRC-56

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	0.85

0.85



S-SRC-82 overview, facing upstream.



S-SRC-82 overview, facing downstream.

STREAM S-SRC-83

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-83			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC LLC	DATE	08.08.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:15	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSOWN 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 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	<input checked="" type="checkbox"/>	700			
<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)

<p style="text-align: center; margin-bottom: 10px;">FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> <p>CHANNEL TOP WIDTH (E)</p> </div>	<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;">0.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (B)</td> <td style="text-align: center;">1.00</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;">0.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (D)</td> <td style="text-align: center;">1.00</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;">3.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">BOTTOM WIDTH (F)</td> <td style="text-align: center;">2.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">OVERALL DEPTH (G)</td> <td style="text-align: center;">1.00</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;">0.75</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">FLOW DEPTH (I)</td> <td style="text-align: center;">0.25</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">APPROX. SURFACE VELOCITY</td> <td style="text-align: center;">1.50</td> <td style="text-align: center;">FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	0.50	FT.	VERTICAL (B)	1.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.	VERTICAL (D)	1.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	3.50	FT.	BOTTOM WIDTH (F)	2.50	FT.	OVERALL DEPTH (G)	1.00	FT.	ORDINARY HIGH WATER MARK (H)	0.75	FT.	FLOW DEPTH (I)	0.25	FT.	APPROX. SURFACE VELOCITY	1.50	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		0.50	FT.																														
	VERTICAL (B)	1.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	0.50	FT.																															
	VERTICAL (D)	1.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	3.50	FT.																															
	BOTTOM WIDTH (F)	2.50	FT.																															
	OVERALL DEPTH (G)	1.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.75	FT.																															
	FLOW DEPTH (I)	0.25	FT.																															
	APPROX. SURFACE VELOCITY	1.50	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 ORIGINS		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/>	SPRING FED	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input type="checkbox"/>	OTHER	

STREAM ID: 5-SLC-B3

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 checked="" type="checkbox"/> SHRUBS	<input type="checkbox"/> GRASSES	<input type="checkbox"/> HERBACEOUS
	DOMINANT SPECIES PRESENT? <i>STRIPED MAPLE, OLM, SPICEWORT</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>75</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
	STUDY REACH AREA	AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>60</i> %	<input type="checkbox"/> RUN <i> </i> %
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL <i> </i> %		
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	<i>-</i>	FT. ²	
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²	
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 <i> </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 <i> </i>
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 <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 <i> </i>	
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 <i> </i>	
	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>-</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~40</i>
BOULDER	256 MM (10 ⁺)	<i>-</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>15</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>25</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>10</i>			
SILT	0.004 - 0.06 MM	<i>50</i>	MARL	GREY, SHELL FRAGMENTS	
CLAY	<0.004 MM (SLICK)	<i>-</i>			



S-SRC-83 overview, facing upstream.



S-SRC-83 overview, facing downstream.

STREAM S-SRC-84

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-84			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRL KLC	DATE	08.08.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	11:20			
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 type="checkbox"/>	AIR TEMPERATURE <u>80</u> °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	<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 area. Three stream segments are labeled: S-SRC-83, S-SRC-84, and S-SRC-86. A north arrow is drawn pointing upwards. The area is labeled 'UPLAND DECIDUOUS' and 'LOGGING ROAD'.

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> <p>CHANNEL TOP WIDTH (E)</p> <p>CHANNEL DEPTH (G)</p> <p>FLOW DEPTH (I)</p> <p>BOTTOM WIDTH (F)</p> <p>ORDINARY HIGH WATER MARK (H)</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>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>7.50</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>3.50</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>0.00</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)	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)	7.50	FT.	BOTTOM WIDTH (F)	3.50	FT.	OVERALL DEPTH (G)	1.50	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)		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)	7.50	FT.																															
	BOTTOM WIDTH (F)	3.50	FT.																															
	OVERALL DEPTH (G)	1.50	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	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input checked="" type="checkbox"/>	OTHER <u>STORM WATER</u>	

STREAM ID: S-SRC-84

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>SUGAR MAPLE, STRIPED MAPLE, BEECH</i>					
INSTREAM FEATURES	STUDY LENGTH	50	FT.	CANOPY COVER		
	STREAM WIDTH	7.50	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN	<input type="checkbox"/> PARTLY SHADED
	STUDY REACH AREA		AC.	<input checked="" type="checkbox"/> SHADED		
	EST. DRAINAGE AREA		SQ. MI.			
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES			PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES		
TAXA PRESENT			<input type="checkbox"/> RIFFLE	<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	
LARGE WOODY DEBRIS	LWD			FT. ²		
	DENSITY OF LWD			FT. ² /MI. ²		
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"/> 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)	~ 33
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	-	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	-			
SAND	0.06 - 0.2 MM (GRITTY)	-			
SILT	0.004 - 0.06 MM	100	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			



S-SRC-84 overview, facing upstream.



S-SRC-84 overview, facing downstream.

STREAM S-SRC-85

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-85			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLC	DATE	08.02.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	11:45	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BL. JUNONTH R	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS						
	<input type="checkbox"/>	STORM (HEAVY RAIN)	<input type="checkbox"/>		AIR TEMPERATURE	80	°F	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS?	
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>					<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>						
	<input checked="" type="checkbox"/>	% CLOUD COVER	100	<input checked="" 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)

<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 style="text-align: center;">HORIZONTAL (A)</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (B)</td> <td style="text-align: center;">2.00</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;">1.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (D)</td> <td style="text-align: center;">2.00</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;">12.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">BOTTOM WIDTH (F)</td> <td style="text-align: center;">10.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">OVERALL DEPTH (G)</td> <td style="text-align: center;">2.00</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;">0.25</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)	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)	12.00	FT.	BOTTOM WIDTH (F)	10.00	FT.	OVERALL DEPTH (G)	2.00	FT.	ORDINARY HIGH WATER MARK (H)	1.00	FT.	FLOW DEPTH (I)	0.25	FT.	APPROX. SURFACE VELOCITY	25.00	FT./SEC
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)	12.00	FT.																															
	BOTTOM WIDTH (F)	10.00	FT.																															
	OVERALL DEPTH (G)	2.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	1.00	FT.																															
	FLOW DEPTH (I)	0.25	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"/> EPHEMERAL	<input type="checkbox"/> TIDAL	<input type="checkbox"/> COLD WATER	<input checked="" type="checkbox"/> WARM WATER	CATCHMENT AREA		SQ. MI.
	STREAM ORIGIN								
	<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	SOMERSET COUNTY						

STREAM ID: S-SRC-85

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 type="checkbox"/> HERBACEOUS			
INSTREAM FEATURES	STUDY LENGTH		CANOPY COVER	
	~400 FT.		<input type="checkbox"/> OPEN <input type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input checked="" type="checkbox"/> SHADED	
	STREAM WIDTH		PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	12.00 FT.		<input checked="" type="checkbox"/> RIFFLE <input type="checkbox"/> RUN <input type="checkbox"/> POOL <input type="checkbox"/> CHANNELIZED	
STUDY REACH AREA		DAM PRESENT		
EST. DRAINAGE AREA		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
MACROINVERTEBRATES PRESENT?		TAXA PRESENT		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		CADDIS, MIDGES		
LARGE WOODY DEBRIS	LWD	FT. ²		
	DENSITY OF LWD	FT. ² /MI. ²		
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			
WATER QUALITY	DOMINANT SPECIES PRESENT			
	PORTION OF THE REACH WITH AQUATIC VEGETATION _____ %			
	TEMPERATURE	WATER ODORS		
	SPEC. CONDUCTANCE	<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		
DISSOLVED OXYGEN	WATER SURFACE OILS			
pH	<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	TURBIDITY (IF NOT MEASURED)			
WQ INSTRUMENT USED	<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"/> 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		
	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)	~25
BOULDER	256 MM (10"+)	10			
COBBLE	64 - 256 MM (2.5 - 10")	30	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	40			
SAND	0.06 - 0.2 MM (GRITTY)	15			
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
A11J	PTC ALLEGHENY TUNNELL			08.08.12	S.S.R.C. 85	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLF		S.S.R.C. 85 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							

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.

Right Side	% Riparian Area>	1.00															1.00 0%			
	Score >	15															15			
CI = Sum (Rt and Lt sub-Indexes)/2																				
Left Side	% Riparian Area>	1.00															1.00 0%	Rt Sub-Index>	0.75 0.00	CI
	Score >	15															15	Lt Sub-Index>	0.75 0.00	

0.75

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							

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.

Right Side	% Riparian Area>	1.00															1.00 0%			
	Score >	15															15			
CI = Sum (Rt and Lt sub-Indexes)/2																				
Left Side	% Riparian Area>	1.00															1.00 0%	Rt Sub-Index>	0.75 0.00	CI
	Score >	16															16	Lt Sub-Index>	0.80 0.00	

0.77

Comments:
 ZOI IS W/IN MATURE DELICIOUS RIPARIAN ZONE OF S.S.R.C. 85.

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	0.76

0.76



S-SRC-85 overview, facing upstream.



S-SRC-85 overview, facing downstream.

STREAM S-SRC-86

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-86			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRL KLE	DATE	05.08.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	13:05	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JUNIOR R.	
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>85</u> °F	
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	0 % CLOUD COVER	<input checked="" type="checkbox"/>	OTHER	
<input checked="" type="checkbox"/>	100 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;"> <p>CHANNEL TOP WIDTH (E)</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>1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>1.00</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>1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>8.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>6.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>1.00</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>2.500</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)	8.00	FT.	BOTTOM WIDTH (F)	6.00	FT.	OVERALL DEPTH (G)	1.00	FT.	ORDINARY HIGH WATER MARK (H)	0.50	FT.	FLOW DEPTH (I)	0.15	FT.	APPROX. SURFACE VELOCITY	2.500	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)	8.00	FT.																															
	BOTTOM WIDTH (F)	6.00	FT.																															
	OVERALL DEPTH (G)	1.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.50	FT.																															
	FLOW DEPTH (I)	0.15	FT.																															
	APPROX. SURFACE VELOCITY	2.500	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	STORMWATER	
	<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-3AC-86

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 type="checkbox"/> NO EVIDENCE	<input checked="" 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 checked="" 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>BASSWOOD, SUGAR MAPLE, SPICE-BUSH</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>1300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>8.00</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 <i> </i> %
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> POOL <i>20</i> %	
	TAXA PRESENT	<i>CADDIS, MIDGES</i>		
	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. ²	
	DENSITY OF LWD	-	FT. ² /MI. ²	
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>Terrestrial</i>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>15</i> %			
WATER QUALITY	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	
			<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 checked="" type="checkbox"/> OTHER	<i>HOVY DEBRIS/TRASH</i>
	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>33</i>
BOULDER	256 MM (10"+)	<i>✓</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>10</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>30</i>			
SILT	0.004 - 0.06 MM	<i>20</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
A15	PTC ALLEGHENY TRUNK			08.08.12	S.S.R.C.-86	
Name(s) of Evaluator(s)		Stream Name and Information				
S.R.C., K.L.C.		S.S.R.C.-86 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.												
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 >	14																	14		
CI = Sum (Rt and Lt sub-Indexes)/2																					
Left Side	% Riparian Area >	1.00																	1.00	0%	
	Score >	14																	14		
Rt Sub-Index > 0.00 0.00																					
Lt Sub-Index > 0.00 0.00																					
CI 0.00																					

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, 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 >	14																	14			
CI = Sum (Rt and Lt sub-Indexes)/2																						
Left Side	% Riparian Area >	1.00																	1.00	0%		
	Score >	14																	14			
Rt Sub-Index > 0.00 0.00																						
Lt Sub-Index > 0.00 0.00																						
CI 0.00																						

0.70

Comments:

ZOI CONSISTS OF MATURE UPLAND DECIDUOUS FOREST w/ MED. SCRUB.

RIPARIAN ECOTONE CONDITION INDEX

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

0.70



S-SRC-86 overview, facing upstream.



S-SRC-86 overview, facing downstream.

STREAM S-SRC-87

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-87			CLIENT	PTC	
STREAM CLASS	RIVERTON			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC ALL	DATE	08.09.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:55	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JUNIORA 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"/>			
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	75 % CLOUD COVER	<input checked="" type="checkbox"/>	10		
	<input type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>		AIR TEMPERATURE	60 °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;"> <p>CHANNEL TOP WIDTH (E)</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>1.00</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>1.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>0.50</td> <td>FT.</td> </tr> <tr> <td rowspan="6">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>1.50</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>0.85</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>< 5.00</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	1.00	FT.	VERTICAL (B)	0.50	FT.	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)	1.50	FT.	OVERALL DEPTH (G)	0.50	FT.	ORDINARY HIGH WATER MARK (H)	0.85	FT.	FLOW DEPTH (I)	0.15	FT.	APPROX. SURFACE VELOCITY	< 5.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		1.00	FT.																														
	VERTICAL (B)	0.50	FT.																															
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)	1.50	FT.																															
	OVERALL DEPTH (G)	0.50	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.85	FT.																															
	FLOW DEPTH (I)	0.15	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 type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> OTHER		

STREAM ID: S-SAC-37

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? <i>Sugar Maple, Tulip Poplar, Fern sp.</i>				
INSTREAM FEATURES	STUDY LENGTH	<i>~300</i>	FT.	CANOPY COVER	
	STREAM WIDTH	<i>2.50</i>	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. ²	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES <input checked="" type="checkbox"/> RIFFLE <i>75</i> % <input type="checkbox"/> RUN <i> </i> % <input checked="" type="checkbox"/> POOL <i>25</i> % CHANNELIZED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DAM PRESENT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
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	
SEDIMENT/SUBSTRATE	DISSOLVED OXYGEN	_____	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	
	pH	_____	<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER	
INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)	TURBIDITY	_____	WATER SURFACE OILS		
	WQ INSTRUMENT USED	<i> </i>	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily	
ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)	ODORS	<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	<input type="checkbox"/> OTHER	
	OILS	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> SLIGHT	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
		<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>~30</i>
BOULDER	256 MM (10"+)	-			
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>30</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>20</i>			
SILT	0.004 - 0.06 MM	<i>20</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	PTA ALLEGHENY TUNNEL			08.09.12	S.SRC.87	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, ILUE		S.SRC.87 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
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>	Score >									%	CI
	1.00	16									1.00 0%	
												CI = Sum (Rt and Lt sub-Indexes)/2
Left Side	% Riparian Area>	Score >									%	CI
	1.00	16									1.00 0%	Rt Sub-Index> 0.00
												Lt Sub-Index> 0.00
												0.00

0.80

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
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>	Score >									%	CI
	1.00	16									1.00 0%	
												CI = Sum (Rt and Lt sub-Indexes)/2
Left Side	% Riparian Area>	Score >									%	CI
	1.00	16									1.00 0%	Rt Sub-Index> 0.00
												Lt Sub-Index> 0.00
												0.00

0.80

Comments:

ZOI CONSISTS OF MATURE DECIDUOUS W/IN RIPARIAN CORRIDOR OF S.SRC.86.

RIPARIAN ECOTONE CONDITION INDEX

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

0.80



S-SRC-87 overview, facing upstream.



S-SRC-87 overview, facing downstream.

STREAM S-SRC-88

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S-SRC-88		CLIENT		PTC	
STREAM CLASS		EPHEMERAL		PROJECT		Allegheny Tunnel	
INVESTIGATORS	SRC	DATE	08.09.12	MM/DD/YR	LOCATION	Somerset County, PA	
	ILLE	TIME	11:26	24 HOUR (I.E. 16:45)			
LATITUDE		LONGITUDE		RIVER BASIN		RAYSDOWN BL. 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 type="checkbox"/>		AIR TEMPERATURE <u>80</u> °F		
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>		OTHER		
	<input checked="" type="checkbox"/>	SD	% CLOUD COVER	10			
<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)

The map shows a plan view of the stream crossing. A dashed line represents the stream S-SRC-88, with a north arrow pointing towards the top right. A solid line represents S-SRC-87. A 'SPRING' is indicated on the left bank. 'UPLAND DECIDUOUS' is noted on the right bank. The stream S-SRC-88 is shown flowing from the upper left towards the lower right.

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)		HORIZONTAL (A)	2.00	FT.
<p>CHANNEL TOP WIDTH (E)</p> <p>CHANNEL DEPTH (G)</p> <p>FLOW DEPTH (I)</p> <p>BOTTOM WIDTH (F)</p> <p>ORDINARY HIGH WATER MARK (H)</p>		LEFT BANK (FACE DOWNSTREAM)		HORIZONTAL (C)	2.00	FT.
				VERTICAL (B)	2.00	FT.
				VERTICAL (D)	2.00	FT.
		CHANNEL DIMENSIONS		TOP WIDTH (E)	12.00	FT.
				BOTTOM WIDTH (F)	8.00	FT.
				OVERALL DEPTH (G)	2.00	FT.
				ORDINARY HIGH WATER MARK (H)	1.00	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 checked="" 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 <u>STORM WATER</u>		

STREAM ID: S-SLC-88

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 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? <u>SUGAR MAPLE, AM. BEECH, BASS WOOD</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>1100</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>12.08</u> FT.	<input type="checkbox"/> OPEN	<input checked="" type="checkbox"/> SHADED
	STUDY REACH AREA	— AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	— SQ. MI.	<input type="checkbox"/> RIFLE <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	
LARGE WOODY DEBRIS	LWD	—	FT. ²	
	DENSITY OF LWD	—	FT. ² /MI. ²	
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
SEDIMENT/SUBSTRATE	TURBIDITY	—	WATER SURFACE OILS	
	WQ INSTRUMENT USED	—	<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
	ODORS	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
	DEPOSITS	<input type="checkbox"/> ANAEROBIC	<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER
	OILS	<input checked="" type="checkbox"/> ABSENT	<input type="checkbox"/> TURBID	<input type="checkbox"/> SLIGHTLY TURBID
		<input type="checkbox"/> MODERATE	<input type="checkbox"/> STAINED	<input type="checkbox"/> OPAQUE
		<input type="checkbox"/> SLIGHT	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
		<input checked="" 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	—	10	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~20
BOULDER	256 MM (10"+)	10			
COBBLE	64 - 256 MM (2.5 - 10")	20	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	—
GRAVEL	2 - 64 MM (0.1 - 2.5")	40			
SAND	0.06 - 0.2 MM (GRITTY)	25			
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
A11J	PTC ALLEGHANY TUNNEL			08.09.12	S-SRC-88	
Name(s) of Evaluator(s)		Stream Name and Information				
SAC, MUE		S-SRC-88 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, tracts, 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								1.00 0%		
	Score >	16								16		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index > 16.00	CI
	Score >	16								16	Lt Sub-Index > 0.00	0.00

0.80

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, tracts, 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								1.00 0%		
	Score >	16								16		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index > 16.00	CI
	Score >	16								16	Lt Sub-Index > 0.00	0.00

0.80

Comments:
 ZOI CONSISTS OF MATURE, DECIDUOUS FOREST W/IN RIPARIAN CORRIDOR OF S-SRC STG.

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
		0.80

0.80



S-SRC-88 overview, facing upstream.



S-SRC-88 overview, facing downstream.

STREAM S-SRC-89

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-89			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAP KLC	DATE	08.01.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	11:45			
LATITUDE		LONGITUDE		RIVER BASIN	FRAYSBURG RR. TUNNEL R	
STATION #	-	RIVERMILE	-	STORET #	-	

WEATHER CONDITIONS	NOW		PAST 24 HOURS		AIR TEMPERATURE	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"/>		80 °F				
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>						
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>						
	<input checked="" type="checkbox"/>	50	% CLOUD COVER	10			<input checked="" type="checkbox"/>	OTHER		
<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)

<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)	1.00	FT.
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	1.00	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)		0.15	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 ORIGIN		
<input type="checkbox"/>	GLACIAL	<input checked="" type="checkbox"/>	SPRING FED	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input type="checkbox"/>	OTHER	

STREAM ID: S-520-89

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

VATERSHED 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 checked="" type="checkbox"/> SHRUBS <input type="checkbox"/> GRASSES <input type="checkbox"/> HERBACEOUS						
	DOMINANT SPECIES PRESENT? <i>SUGAR MAPLE, STRIPED MAPLE, SPIROBUS II</i>						
INSTREAM FEATURES	STUDY LENGTH	<i>~150</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	<i>-</i>	AC.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES			
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	<input checked="" type="checkbox"/> RIFFLE <i>100</i> %	<input type="checkbox"/> RUN <i>0</i> %		
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> POOL			
TAXA PRESENT	<i>PADDIS, MEDGUS</i>			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. ²			
	DENSITY OF LWD			FT. ² /MI. ²			
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>MONEYWORT, CAREX SP., SPERMATOPHYTES</i>						
	PORTION OF THE REACH WITH AQUATIC VEGETATION <i>75</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			
				<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	-	-	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~30</i>
BOULDER	256 MM (10"+)	-			
COBBLE	64 - 256 MM (2.5 - 10")	<i>70</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>10</i>			
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

Name(s) of Evaluator(s)	Stream Name and Information

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
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%	CI = Sum (Rt and Lt sub-Indexes)/2		
	Score >	17															17			
Left Side	% Riparian Area>	1.00															1.00 0%	Rt Sub-Index>	0.00	CI
	Score >	17															17	Lt Sub-Index>	0.00	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							
	20	19	18	17	16	15	14	13	12	11	10	9	8	7		6	5	4	3	2
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 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%	CI = Sum (Rt and Lt sub-Indexes)/2		
	Score >	17															17			
Left Side	% Riparian Area>	1.00															1.00 0%	Rt Sub-Index>	0.00	CI
	Score >	17															17	Lt Sub-Index>	0.00	0.00

0.85

Comments:

ZOI CONSISTS OF MATURE DECIDUOUS W/EN
RIPARIAN CORRIDOR OF S.S.R.C. 56.

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 CIs)/2	0.85

0.85



S-SRC-89 overview, facing upstream.



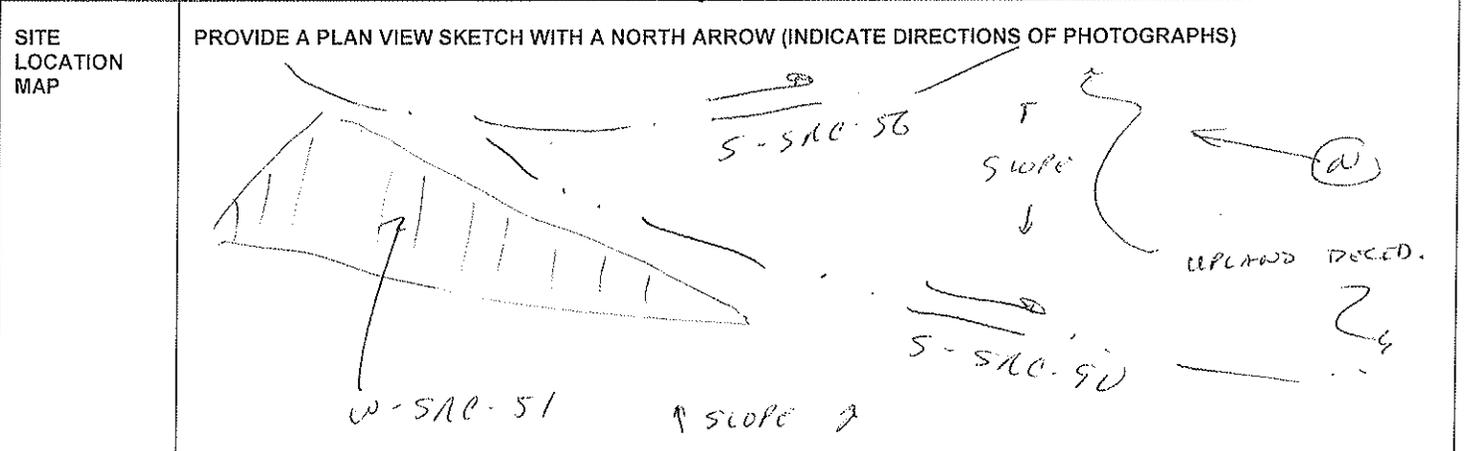
S-SRC-89 overview, facing downstream.

STREAM S-SRC-90

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-90			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KWC	DATE	08.12.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	12:05	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	Raystown Br., J.W. H.A.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"/>			
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	100	% CLOUD COVER	10		<input checked="" type="checkbox"/>	AIR TEMPERATURE
<input type="checkbox"/>	CLEAR/SUNNY		<input checked="" type="checkbox"/>	OTHER			



<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <p style="text-align: center;">CHANNEL TOP WIDTH (E)</p> <p style="text-align: center;">CHANNEL DIMENSIONS</p>		<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>2.00</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>3.00</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>7.50</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>2.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>1.00</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)	2.00	FT.	VERTICAL (B)	2.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.	VERTICAL (D)	1.50	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	7.50	FT.	BOTTOM WIDTH (F)	3.00	FT.	OVERALL DEPTH (G)	2.00	FT.	ORDINARY HIGH WATER MARK (H)	1.00	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00		FT.																															
	VERTICAL (B)	2.00	FT.																																
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.																																
	VERTICAL (D)	1.50	FT.																																
CHANNEL DIMENSIONS	TOP WIDTH (E)	7.50	FT.																																
	BOTTOM WIDTH (F)	3.00	FT.																																
	OVERALL DEPTH (G)	2.00	FT.																																
	ORDINARY HIGH WATER MARK (H)	1.00	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	
<input type="checkbox"/>	NON-GLACIAL MONTANE	<input type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input checked="" type="checkbox"/>	OTHER	
		SACRAMENTO		

STREAM ID: S-SAC-90

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? <u>SUGAR MAPLE, AM. BEECH, STRIPED MAPLE</u>	
INSTREAM FEATURES	STUDY LENGTH	<u>~200</u>	FT.	CANOPY COVER		
	STREAM WIDTH	<u>7.50</u>	FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN	<input type="checkbox"/> PARTLY SHADED
	STUDY REACH AREA	<u>-</u>	AC.	<input checked="" type="checkbox"/> SHADED		
	EST. DRAINAGE AREA	<u>-</u>	SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES		
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> POOL	<input type="checkbox"/> RUN	<input type="checkbox"/> %
TAXA PRESENT	<u>-</u>		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	<u>-</u>	FT. ²			
	DENSITY OF LWD	<u>-</u>	FT. ² /MI. ²			
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"/> 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>10</u>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<u>~20</u>
BOULDER	256 MM (10"+)	<u>-</u>			
COBBLE	64 - 256 MM (2.5 - 10")	<u>40</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>20</u>			
SILT	0.004 - 0.06 MM	<u>10</u>	MARL	GREY, SHELL FRAGMENTS	<u>-</u>
CLAY	<0.004 MM (SLICK)	<u>-</u>			



S-SRC-90 overview, facing upstream.



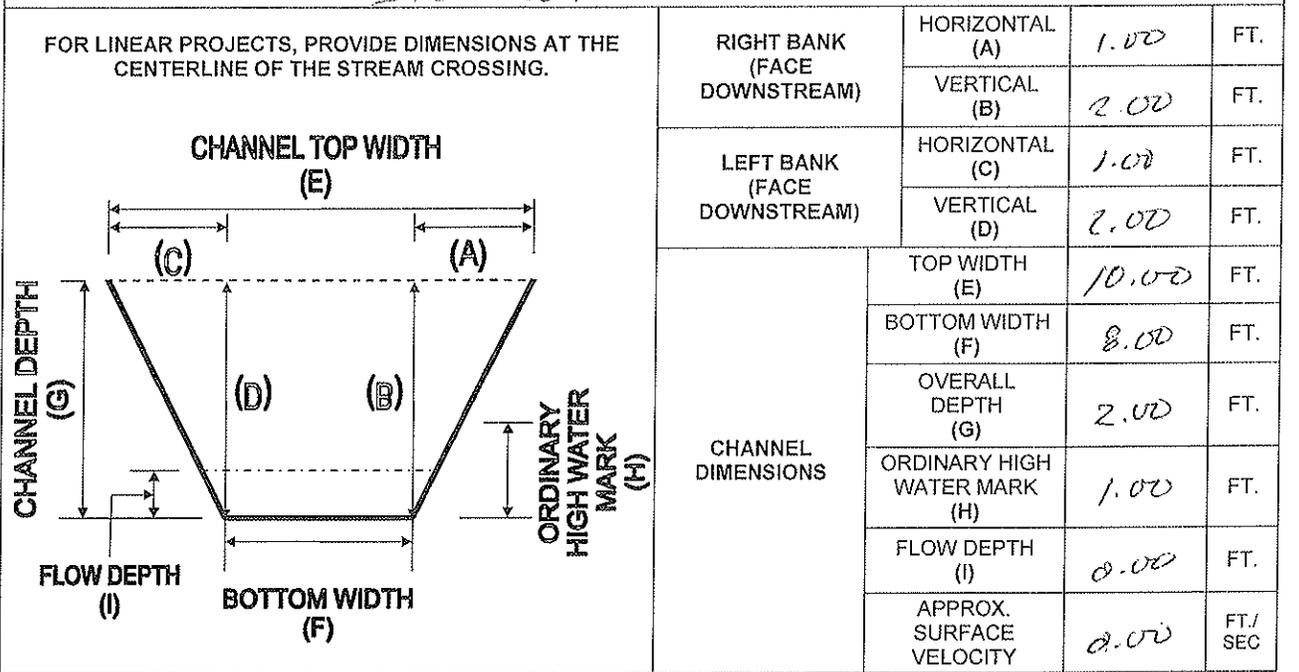
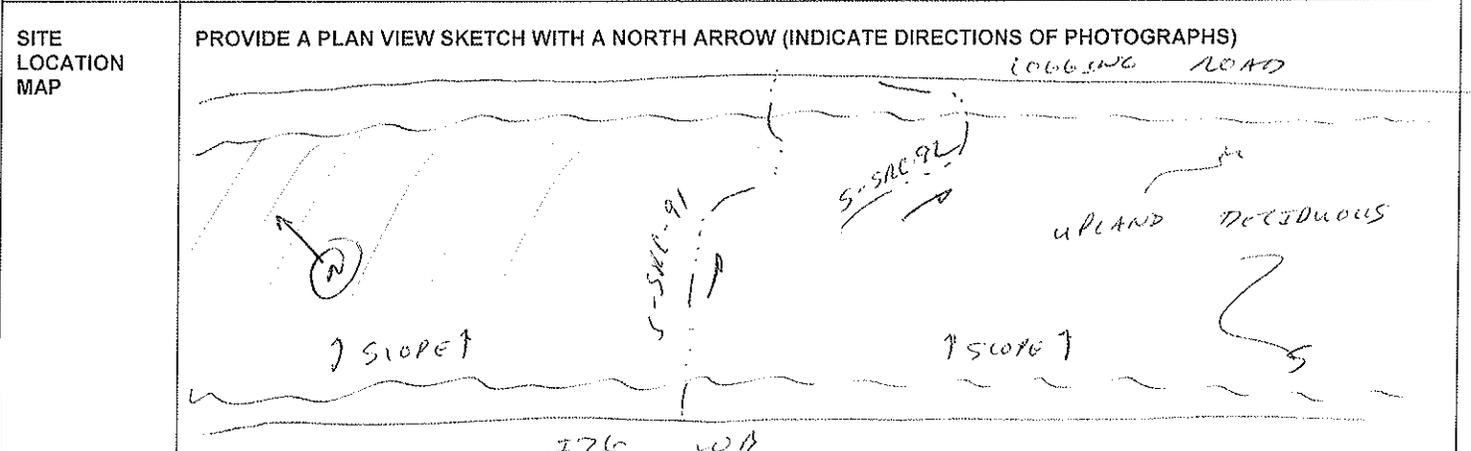
S-SRC-90 overview, facing downstream.

STREAM S-SRC-91

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SAC-91			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLG	DATE	08.09.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	13:30	24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RAMSTOWN DR. 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 type="checkbox"/>				
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	100% CLOUD COVER	<input checked="" type="checkbox"/>	10	AIR TEMPERATURE	85	°F
	<input type="checkbox"/>	CLEAR/SUNNY	<input checked="" type="checkbox"/>	OTHER			



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: <u>STORM WATER</u>	

STREAM ID: 5-SAC-91

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 type="checkbox"/> NO EVIDENCE	<input checked="" 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 type="checkbox"/> NONE	<input checked="" 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>SUGAR MAPLE, BASS WOOD, WHITE SWALLOW</i>					
INSTREAM FEATURES	STUDY LENGTH	<i>2200</i>	FT.	CANOPY COVER		
	STREAM WIDTH	<i>8.00</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.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES		
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> POOL	<input type="checkbox"/> RUN	<input type="checkbox"/> %
TAXA PRESENT	<i>-</i>		<input type="checkbox"/> CHANNELIZED	<input type="checkbox"/> DAM PRESENT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. ²			
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²			
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"/> 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 checked="" type="checkbox"/> OTHER	<i>HWY DEBRIS / TRASH</i>		
	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>-</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~10</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)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>30</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>30</i>			
SILT	0.004 - 0.06 MM	<i>-</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	ARC ALLEGHENY TUNNEL			08.09.12	S.SRC-91	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, HLF		S.SRC-91 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.						
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>	0.75	0.25						1.00	0%
	Score >	13	6							11.25
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	0.75	0.25						1.00	0%
	Score >	13	6							11.25
Rt Sub-Index> 0.56000 Lt Sub-Index> 0.56000										
CI 0.00										

0.56

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>	0.75	0.25						1.00	0%
	Score >	13	6							11.25
CI = Sum (Rt and Lt sub-Indexes)/2										
Left Side	% Riparian Area>	0.75	0.25						1.00	0%
	Score >	13	6							11.25
Rt Sub-Index> 0.56000 Lt Sub-Index> 0.56000										
CI 0.00										

0.56

Comments:
 ZOI INCLUDES MATURE, UPLAND DELIQUOUS AND UN-MAINTAINED SCRUB/HERBACEOUS.

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
	0.00

0.56



S-SRC-91 overview, facing upstream.



S-SRC-91 overview, facing downstream.

STREAM S-SRC-92

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	3-SAC-92			CLIENT	PTC	
STREAM CLASS	Ephemeral			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KCC	DATE	08.09.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	13:41	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 type="checkbox"/> NO AIR TEMPERATURE <input type="text"/> °F OTHER <input type="text"/>	
	<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 type="checkbox"/>	% CLOUD COVER		<input 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)

Refer to 3-SAC-91

<p style="text-align: center;">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;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (B)</td> <td style="text-align: center;">1.00</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;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">VERTICAL (D)</td> <td style="text-align: center;">1.00</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;">5.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">BOTTOM WIDTH (F)</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">OVERALL DEPTH (G)</td> <td style="text-align: center;">1.00</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;">0.50</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">FLOW DEPTH (I)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;">FT.</td> </tr> <tr> <td style="text-align: center;">APPROX. SURFACE VELOCITY</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;">FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	3.00	FT.	VERTICAL (B)	1.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.	VERTICAL (D)	1.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	5.00	FT.	BOTTOM WIDTH (F)	3.00	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
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		3.00	FT.																														
	VERTICAL (B)	1.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.																															
	VERTICAL (D)	1.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	5.00	FT.																															
	BOTTOM WIDTH (F)	3.00	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 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="text"/> SQ. MI.	
STREAM ORIGIN		MIXTURE OF ORIGINS		
<input type="checkbox"/> GLACIAL	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> SPRING FED		
<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> SWAMP AND BOG	<input checked="" type="checkbox"/> OTHER SPERMATOPHYTES		

STREAM ID: S-SLC-92

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 type="checkbox"/> NO EVIDENCE	<input checked="" 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 type="checkbox"/> NONE	<input checked="" 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>ASH, DOMESTIC APPLE, JOURNAL WEED.</i>					
INSTREAM FEATURES	STUDY LENGTH	<i>~100</i>	FT.	CANOPY COVER		
	STREAM WIDTH	<i>5-00</i>	FT.	<input type="checkbox"/> OPEN	<input checked="" type="checkbox"/> PARTLY OPEN	<input type="checkbox"/> PARTLY SHADED
	STUDY REACH AREA	<i>-</i>	AC.	<input type="checkbox"/> SHADED		
	EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES		
	MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> POOL	<input type="checkbox"/> RUN
TAXA PRESENT	<i>✓</i>		<input 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	
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. ²			
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²			
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		
				<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			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 checked="" type="checkbox"/> SAND		
	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> RELICT SHELLS			
	<input type="checkbox"/> OTHER		<input checked="" type="checkbox"/> OTHER	<i>HWOY DEBRIS / TRASH</i>		
	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>~25</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>60</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>30</i>			
SILT	0.004 - 0.06 MM	<i>10</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
A10	PR ALLEGANY TUNNEL			08.07.12	S.SRC-92	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLE		S.SRC-92 UNT TO RAYSTOWN BR., JUNCTION 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				

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 >	6										6		
													CI= Sum (Rt and Lt sub-Indexes)/2	
Left Side	% Riparian Area>	1.00										1.00 0%	Rt Sub-Index> 0.30 0.00	
	Score >	6										6	Lt Sub-Index> 0.30 0.00	CI 0.30

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				

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 >	6										6		
													CI= Sum (Rt and Lt sub-Indexes)/2	
Left Side	% Riparian Area>	1.00										1.00 0%	Rt Sub-Index> 0.30 0.00	
	Score >	6										6	Lt Sub-Index> 0.30 0.00	CI 0.30

Comments:
 ZOI CONSISTS OF UNMAINTAINED HERBACEOUS AND SCRUB/SITALLS.

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	0.30



S-SRC-92 overview, facing upstream.



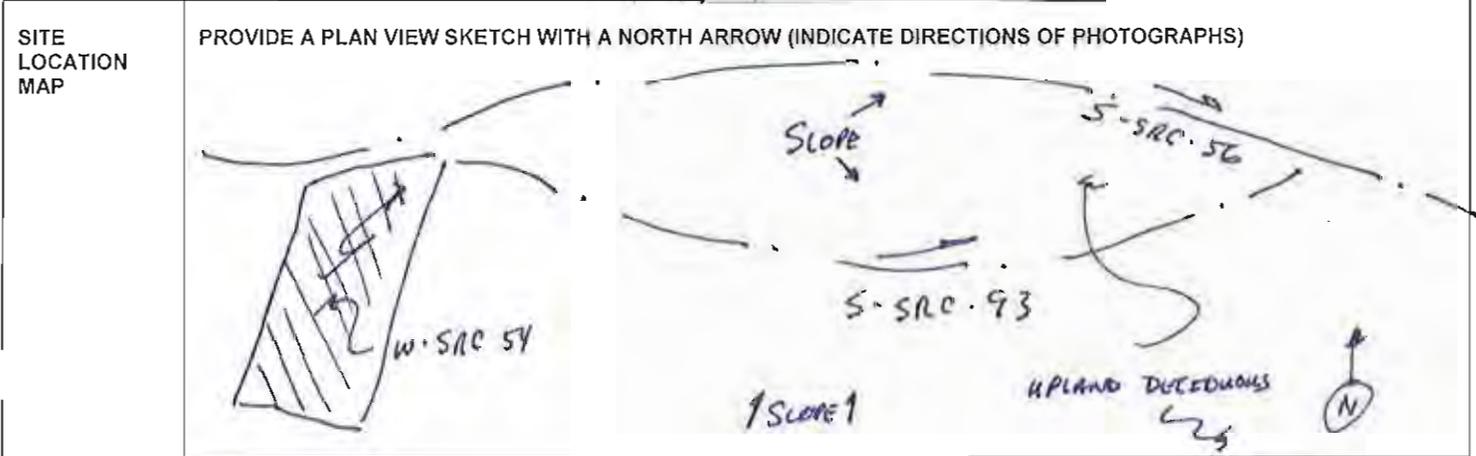
S-SRC-92 overview, facing downstream.

STREAM S-SRC-93

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SRC. 93	CLIENT	PTC
STREAM CLASS	INTERMITTENT	PROJECT	Allegheny Tunnel
INVESTIGATORS	SRC KLE	DATE	08.13.12
		TIME	10:27
LATITUDE		LONGITUDE	
STATION #		RIVERMILE	
		24 HOUR (I.E. 16:45)	LOCATION
			Somerset County, PA
			RIVER BASIN
			RAYSTOWN BR., JAMES R.
			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"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	STORM (HEAVY RAIN)		AIR TEMPERATURE	65 °F
	RAIN (STEADY RAIN)		OTHER	
	SHOWERS (INTERMITTENT)			
	<input checked="" type="checkbox"/> 25 % CLOUD COVER	<input checked="" type="checkbox"/> 25		
	<input type="checkbox"/> CLEAR/SUNNY	<input checked="" type="checkbox"/>		



<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <div style="text-align: center;"> <p>CHANNEL TOP WIDTH (E)</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>2.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>2.00</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>2.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>8.00</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>2.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>1.00</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)	2.00	FT.	VERTICAL (B)	2.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.	VERTICAL (D)	2.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.	BOTTOM WIDTH (F)	4.00	FT.	OVERALL DEPTH (G)	2.00	FT.	ORDINARY HIGH WATER MARK (H)	1.00	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		2.00	FT.																														
	VERTICAL (B)	2.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.																															
	VERTICAL (D)	2.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	8.00	FT.																															
	BOTTOM WIDTH (F)	4.00	FT.																															
	OVERALL DEPTH (G)	2.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	1.00	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		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> OTHER		

STREAM ID: *S.SRC.93*

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 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>SUGAR MAPLE, TULIP POPLAR</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~200</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>8.00</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 type="checkbox"/> RIFLE	<input type="checkbox"/> RUN
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> POOL	<input type="checkbox"/> %	
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. ²	
	DENSITY OF LWD	—	FT. ² /MI. ²	
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	
	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"/> 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	-	<i>5</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~15</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>15</i>			
SILT	0.004 - 0.06 MM	<i>5</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
A113	PT ALLEGHENY CHANNEL			08.12.12	5-SAC-93	
Name(s) of Evaluator(s)		Stream Name and Information				
SAC, HLE		5-SAC-93 UNT TO RAYSTOWN BR., JUNETA 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-til 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 >	1.00								1.00 0%			
	Score >	14								14			
											CI = Sum (Rt and Lt sub-Indexes)/2		
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index >	14 0.00	CI
	Score >	14								14	Lt Sub-Index >	0.00	0.00

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, mowed, and maintained areas, nurseries, no-til 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
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 >	14								14			
											CI = Sum (Rt and Lt sub-Indexes)/2		
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index >	14 0.00	CI
	Score >	14								14	Lt Sub-Index >	0.00	0.00

0.70

Comments:
 ZOI CONSISTS OF MATURE DECIDUOUS FOREST WITH THE RIPARIAN ZONE OF 5-SAC-56.

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



S-SRC-93 overview, facing upstream.



S-SRC-93 overview, facing downstream.

STREAM S-SRC-94

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SRC. 94			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SRC KLE	DATE	08.13.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	10:40			
LATITUDE		LONGITUDE		RIVER BASIN	RAISTOWN BR., JUNIORA 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	70 °F	
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>					
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>			OTHER		
	<input checked="" type="checkbox"/>	25	% CLOUD COVER	25	<input checked="" type="checkbox"/>				
<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)

UPLAND DECIDUOUS

S-SRC-94

S-SRC-58

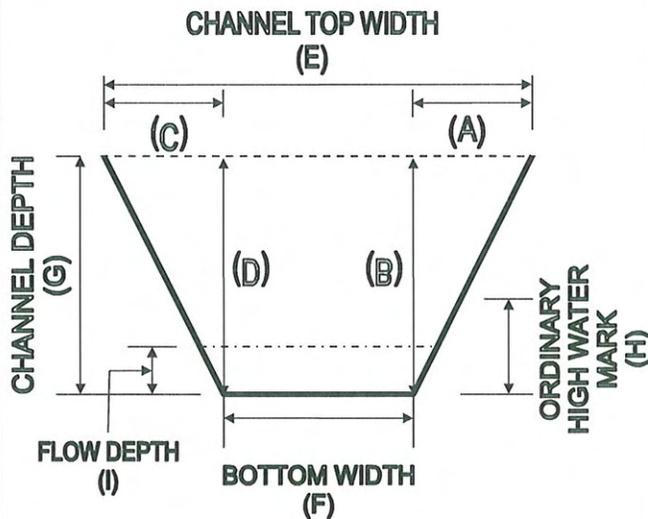
S-SRC-9T

↑ SLOPE ↓

↑ SLOPE ↑

↑ N ↓

FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.



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)	8.00	FT.
	BOTTOM WIDTH (F)	6.00	FT.
	OVERALL DEPTH (G)	1.00	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 type="checkbox"/> TIDAL		CATCHMENT AREA _____ SQ. MI.		
	STREAM ORIGIN			OTHER ORIGINS		
	<input type="checkbox"/> GLACIAL	<input checked="" type="checkbox"/> SPRING FED		<input type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> NON-GLACIAL MONTANE	<input type="checkbox"/> OTHER				
	<input type="checkbox"/> SWAMP AND BOG					

STREAM ID: *S-SRC-94*

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? <i>SUGAR MAPLE, TULIP POPLAR</i>		
INSTREAM FEATURES	STUDY LENGTH	<i>~100</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>8.00</i> FT.	<input type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN
LARGE WOODY DEBRIS	LWD	<i>-</i>	<input type="checkbox"/> PARTLY SHADED	<input checked="" type="checkbox"/> SHADED
	DENSITY OF LWD	<i>-</i>	FT. ²	
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	DOMINANT SPECIES PRESENT
WATER QUALITY	TEMPERATURE	°C	WATER ODORS	
	SPEC. CONDUCTANCE		<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
SEDIMENT/SUBSTRATE	DISSOLVED OXYGEN		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH		<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)	TURBIDITY		WATER SURFACE OILS	
	WQ INSTRUMENT USED		<input type="checkbox"/> SLICK	<input type="checkbox"/> SHEEN - Oily
ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)	ODORS		<input type="checkbox"/> GLOBS	<input type="checkbox"/> FLECKS
	DEPOSITS		<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER
SUBSTRATE TYPE	<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> ANAEROBIC	TURBIDITY (IF NOT MEASURED)	
	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> CLEAR	<input type="checkbox"/> SLIGHTLY TURBID
DIAMETER	<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> TURBID	<input type="checkbox"/> OPAQUE
% COMPOSITION IN SAMPLING REACH	<input type="checkbox"/> OTHER		<input type="checkbox"/> STAINED	<input type="checkbox"/> OTHER
CHARACTERISTIC	OILS		UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
% COMPOSITION IN SAMPLING REACH	<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>~75</i>
BOULDER	256 MM (10"+)	<i>5</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>10</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>15</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>20</i>	MARL	GREY, SHELL FRAGMENTS	<i>-</i>
SILT	0.004 - 0.06 MM	<i>50</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	DTT ALLEGHENY TRUNK			08.12.12	S-SAC-94	
Name(s) of Evaluator(s)		Stream Name and Information				
SAC, KLE		S-SAC-94 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													
	High		Low		High		Low													
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 >	14								14				
												CI = Sum (Rt and Lt sub-Indexes)/2		
Left Side	% Riparian Area >	1.00								1.00 0%				CI
	Score >	14								14				
												Rt Sub-Index > 0.70 0.00		CI
												Lt Sub-Index > 0.70 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													
	High		Low		High		Low													
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 >	13								13				
												CI = Sum (Rt and Lt sub-Indexes)/2		
Left Side	% Riparian Area >	1.00								1.00 0%				CI
	Score >	15								15				
												Rt Sub-Index > 0.65 0.00		CI
												Lt Sub-Index > 0.75 0.00		

Comments:
 ZOI CONSISTS OF MATURE DECIDUOUS FOREST WITH THE RIPARIAN ZONE OF S-SAC-56.

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 CIs)/2
	0.80



S-SRC-94 overview, facing upstream.



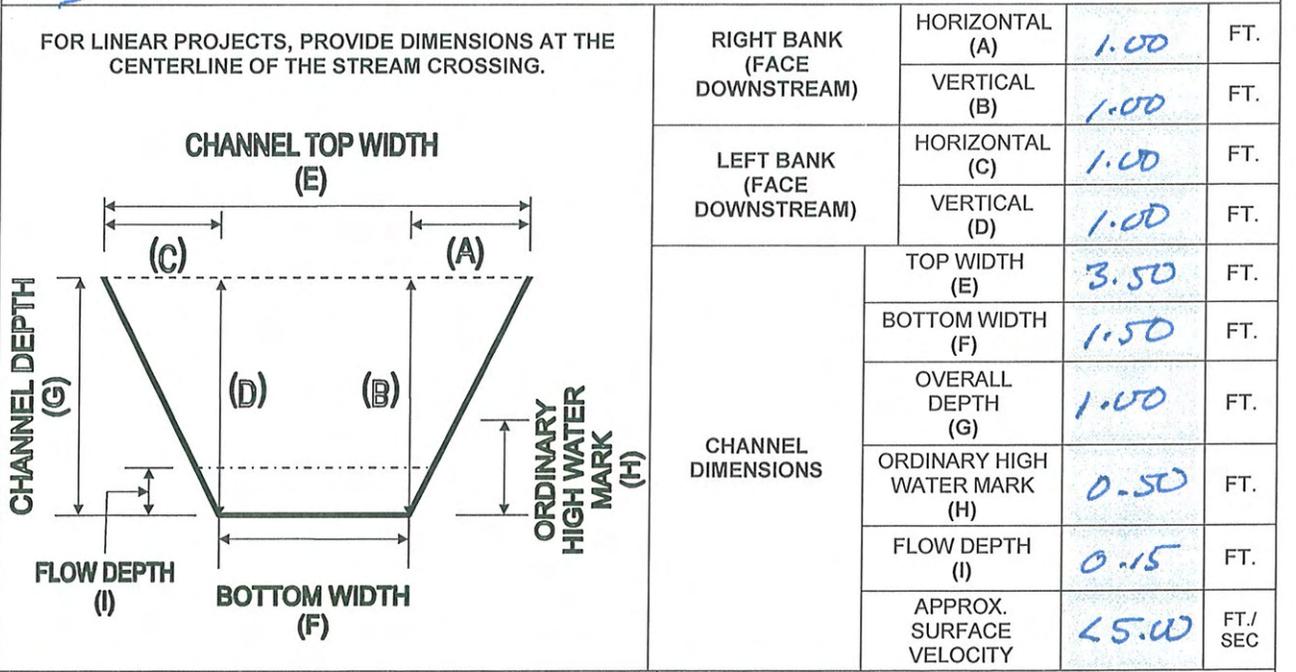
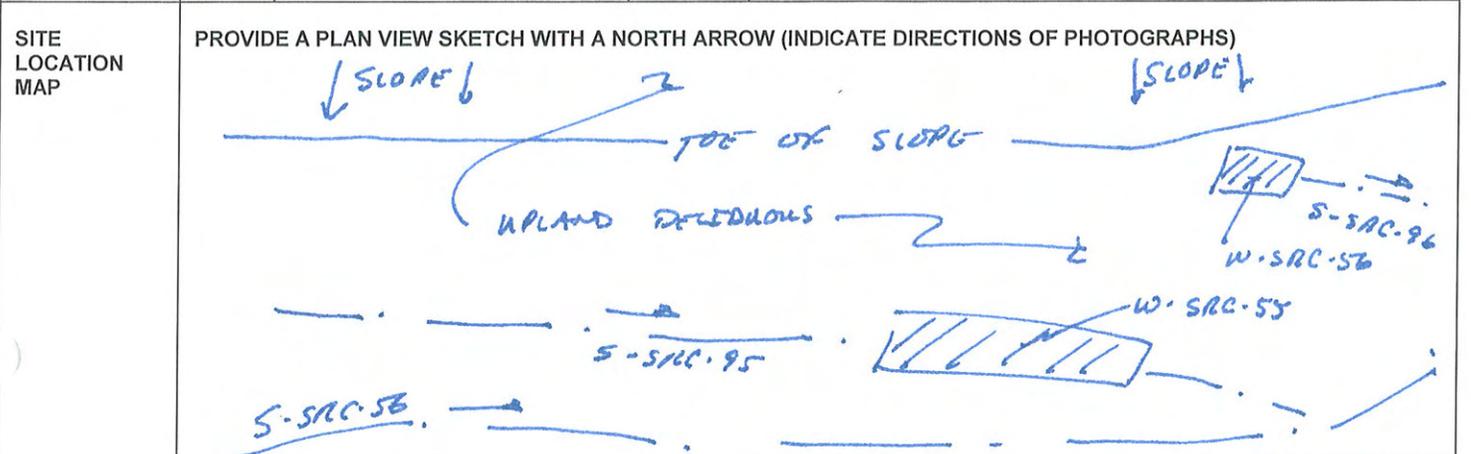
S-SRC-94 overview, facing downstream.

STREAM S-SRC-95

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME		S. SAC. 95		CLIENT		PTC	
STREAM CLASS		PERENNIAL		PROJECT		Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	08.13.12	MM/DD/YR	LOCATION	Somerset County, PA	
		TIME	10:49	24 HOUR (I.E. 16:45)			
LATITUDE		LONGITUDE		RIVER BASIN		RAYSDOWN BR., JUNIATA	
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		
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>			
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>	70 °F		
	<input checked="" type="checkbox"/>	25	% CLOUD COVER	25	OTHER		
<input type="checkbox"/>	CLEAR/SUNNY		<input type="checkbox"/>				



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 type="checkbox"/>	MIXTURE OF ORIGINS	
<input type="checkbox"/>	SWAMP AND BOG	<input type="checkbox"/>	OTHER	

STREAM ID: S-SRC-95

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"/> 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? SUGAR MAPLE, TULEP POPLAR	
INSTREAM FEATURES	STUDY LENGTH	FT.	CANOPY COVER			
	STREAM WIDTH	FT.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	STUDY REACH AREA	AC.	OPEN	PARTLY OPEN	PARTLY SHADED	SHADED
	EST. DRAINAGE AREA	SQ. MI.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES			
MACROINVERTEBRATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> RIFFLE	<input type="checkbox"/>	<input type="checkbox"/> RUN	<input type="checkbox"/>	%
TAXA PRESENT	MEDGGS, CADDIS	<input type="checkbox"/> NO	<input type="checkbox"/> POOL	<input type="checkbox"/>	<input type="checkbox"/>	%
		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. ²				
	DENSITY OF LWD	FT. ² /MI. ²				
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 CAREX SP., JENKINSONIA					
	PORTION OF THE REACH WITH AQUATIC VEGETATION ~ 50					%
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	-	5	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	~50
BOULDER	256 MM (10"+)	10			
COBBLE	64 - 256 MM (2.5 - 10")	25			
GRAVEL	2 - 64 MM (0.1 - 2.5")	10	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	
SAND	0.06 - 0.2 MM (GRITTY)	20			
SILT	0.004 - 0.06 MM	30	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	PR ALLEGHENY TRIBUTARY			08.13.12	S.S.R.C.-95	
Name(s) of Evaluator(s)		Stream Name and Information				
SRL, LLC		S.S.R.C.-95 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					

- 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								100.00%		
	Score >	17								17		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								100.00%	Rt Sub-Index > 17.00	CI
	Score >	17								17	Lt Sub-Index > 17.00	0.00

0.86

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								100.00%		
	Score >	17								17		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								100.00%	Rt Sub-Index > 17.00	CI
	Score >	17								17	Lt Sub-Index > 17.00	0.00

0.85

Comments:
 ZOI CONSISTS OF MATURE DECIDUOUS FOREST WITH RIPARIAN CORRIDOR OF S.S.R.C.-95.

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 CIs)/2
		0.00

0.85



S-SRC-95 overview, facing upstream.



S-SRC-95 overview, facing downstream.

STREAM S-SRC-96

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SAC. 96			CLIENT	PTC	
STREAM CLASS	PERENNIAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	08.13.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME		24 HOUR (I.E. 16:45)		
LATITUDE		LONGITUDE		RIVER BASIN	RHYSTOWN CR., 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 type="checkbox"/>			AIR TEMPERATURE	70	°F
	<input type="checkbox"/>	RAIN (STEADY RAIN)	<input type="checkbox"/>			OTHER		
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)	<input type="checkbox"/>					
	<input checked="" type="checkbox"/>	25 % CLOUD COVER	25	<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)

Refer to S-SAC-95.

<p style="text-align: center;">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="width: 20%;">RIGHT BANK (FACE DOWNSTREAM)</td> <td style="width: 15%;">HORIZONTAL (A)</td> <td style="width: 15%;">0.50</td> <td style="width: 10%;">FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>1.00</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>1.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td>BOTTOM WIDTH (F)</td> <td>2.00</td> <td>FT.</td> </tr> <tr> <td>OVERALL DEPTH (G)</td> <td>1.00</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>< 5.00</td> <td>FT./SEC</td> </tr> </table>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	0.50	FT.	VERTICAL (B)	1.00	FT.	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)	2.00	FT.	OVERALL DEPTH (G)	1.00	FT.	ORDINARY HIGH WATER MARK (H)	0.50	FT.	FLOW DEPTH (I)	0.15	FT.	APPROX. SURFACE VELOCITY	< 5.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		0.50	FT.																														
	VERTICAL (B)	1.00	FT.																															
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)	2.00	FT.																															
	OVERALL DEPTH (G)	1.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	0.50	FT.																															
	FLOW DEPTH (I)	0.15	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 type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> OTHER		

STREAM ID: *S. SRC. 96*

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>SUGAR MAPLE, TULIP POPLAR</i>				
INSTREAM FEATURES	STUDY LENGTH	<i>~100</i>	FT.	CANOPY COVER	
	STREAM WIDTH	<i>300</i>	FT.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	STUDY REACH AREA	<i>-</i>	AC.	OPEN	PARTLY OPEN
EST. DRAINAGE AREA	<i>-</i>	SQ. MI.	PARTLY SHADED	SHADED	
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/>	YES	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES <input checked="" type="checkbox"/> RIFFLE <i>100</i> % <input type="checkbox"/> RUN % <input type="checkbox"/> POOL % TAXA PRESENT <i>CADDIS, MIDGES</i> 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	<i>-</i>	FT. ²		
DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²			
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>CAREX SP., FINE WOOD</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>~25</i> %				
	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			<input 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
			<input checked="" type="checkbox"/>	TURBIDITY (IF NOT MEASURED)	<input type="checkbox"/> SLIGHTLY TURBID
SEDIMENT/SUBSTRATE	ODORS		DEPOSITS		
	<input checked="" type="checkbox"/>	NORMAL	<input type="checkbox"/>	SLUDGE	<input type="checkbox"/> SAWDUST
	<input type="checkbox"/>	SEWAGE	<input type="checkbox"/>	PAPER FIBER	<input type="checkbox"/> SAND
<input type="checkbox"/>	PETROLEUM	<input type="checkbox"/>	RELICT SHELLS		
<input type="checkbox"/>	OTHER	<input type="checkbox"/>	OTHER		
<input checked="" type="checkbox"/>	ABSENT	<input type="checkbox"/>	SLIGHT	UNDERSIDES OF NON-EMBEDDED STONES BLACK IN COLOR?	
<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>~20</i>
BOULDER	256 MM (10"+)	<i>10</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>30</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-96 overview, facing upstream.



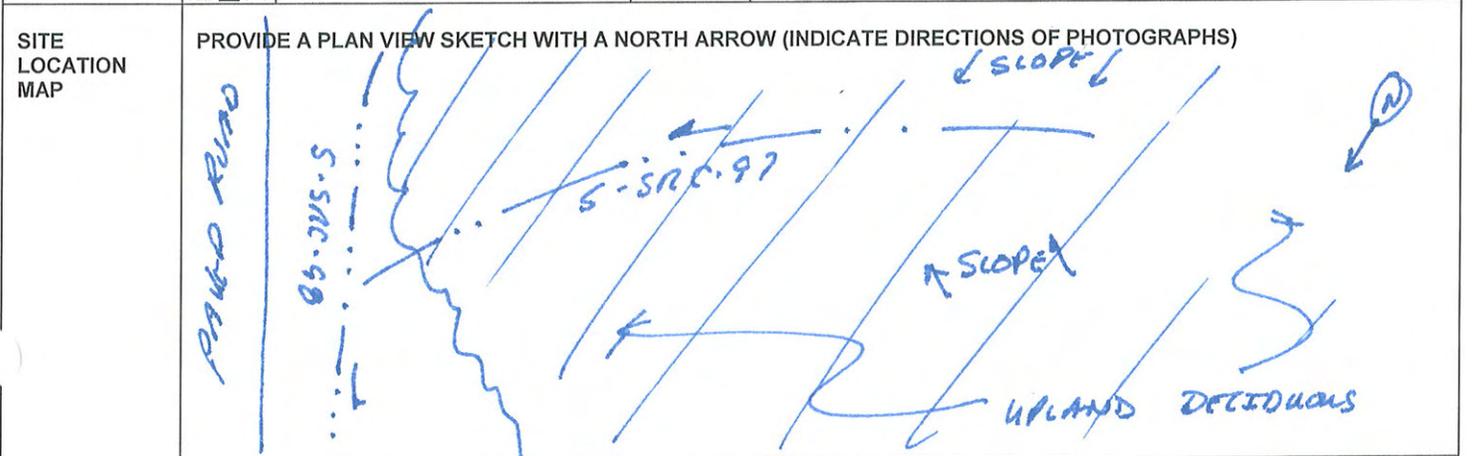
S-SRC-96 overview, facing downstream.

STREAM S-SRC-97

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	<i>S. SRC. 97</i>			CLIENT	PTC	
STREAM CLASS	<i>INTERMITTENT</i>			PROJECT	Allegheny Tunnel	
INVESTIGATORS	<i>SNO KLE</i>	DATE	<i>08.13.12</i>	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	<i>13:40</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 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"/>	<i>25</i> % CLOUD COVER	<i>25</i>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>		AIR TEMPERATURE <i>70</i> °F
					OTHER



<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	<i>1.00</i>	FT.
			VERTICAL (B)	<i>1.00</i>
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	<i>1.00</i>	FT.
		VERTICAL (D)	<i>1.00</i>	FT.
	CHANNEL DIMENSIONS	TOP WIDTH (E)	<i>5.00</i>	FT.
		BOTTOM WIDTH (F)	<i>3.00</i>	FT.
		OVERALL DEPTH (G)	<i>1.00</i>	FT.
		ORDINARY HIGH WATER MARK (H)	<i>0.50</i>	FT.
		FLOW DEPTH (I)	<i>0.15</i>	FT.
		APPROX. SURFACE VELOCITY	<i>45.00</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 _____ SQ. MI.	
	STREAM ORIGIN		OTHER <i>STORMWATER</i>	
	<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-97*

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 type="checkbox"/> NO EVIDENCE <input checked="" type="checkbox"/> SOME POTENTIAL SOURCES <input type="checkbox"/> OBVIOUS SOURCES LOCAL WATERSHED EROSION <input type="checkbox"/> NONE <input checked="" 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>SUGAR MAPLE, ASH</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~400</i> FT.	CANOPY COVER	
	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.	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
	EST. DRAINAGE AREA	- SQ. MI.	<input checked="" type="checkbox"/> RIFFLE	<i>100</i> % <input type="checkbox"/> RUN <i> </i> %
	MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> POOL	<i> </i> %
	TAXA PRESENT	<i>MRIDGES</i>	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. ²	
	DENSITY OF LWD	-	FT. ² /MI. ²	
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	
	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 checked="" type="checkbox"/> OTHER	<i>H.W. DEBRIS / TRASH</i>	
	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>10</i>	DETRITUS	STICKS, WOOD, COARSE PLANT MATERIALS (CPOM)	<i>~50</i>
BOULDER	256 MM (10"+)	<i>5</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>15</i>	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	<i>-</i>
GRAVEL	2 - 64 MM (0.1 - 2.5")	<i>45</i>			
SAND	0.06 - 0.2 MM (GRITTY)	<i>15</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-97 overview, facing upstream.



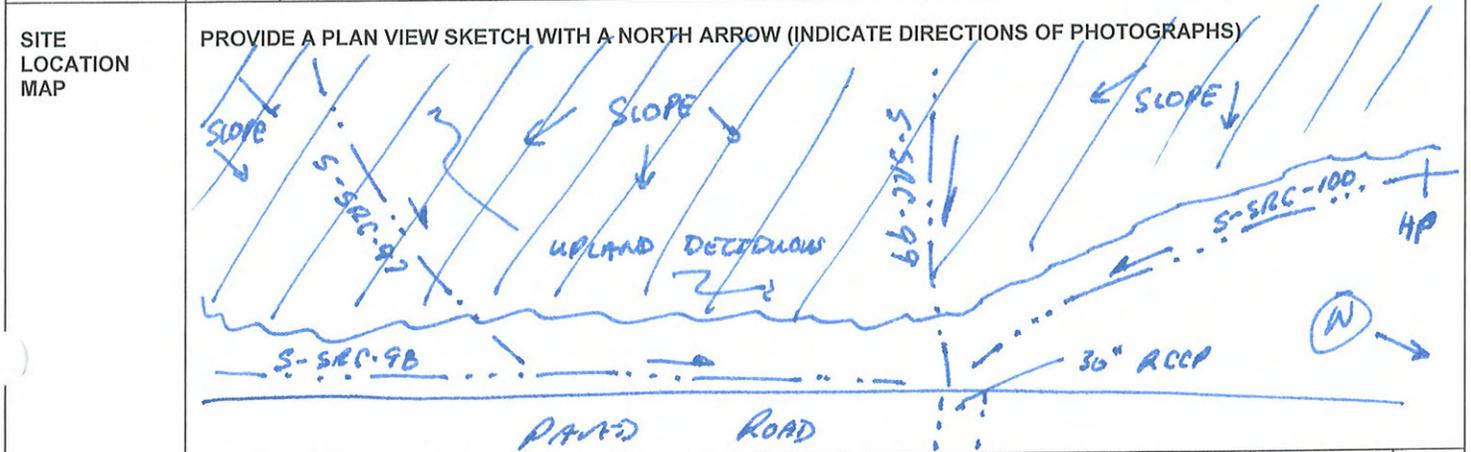
S-SRC-97 overview, facing downstream.

STREAM S-SRC-98

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-98	CLIENT	PTC
STREAM CLASS	EPHEMERAL	PROJECT	Allegheny Tunnel
INVESTIGATORS	SRC KLG	DATE	08.12.12
		TIME	13:48
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	STORM (HEAVY RAIN)	<input type="checkbox"/>	PAST 24 HOURS	<input type="checkbox"/>	HAS THERE BEEN A HEAVY RAIN IN THE LAST 7 DAYS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
		RAIN (STEADY RAIN)	<input type="checkbox"/>		<input type="checkbox"/>		
		SHOWERS (INTERMITTENT)	<input type="checkbox"/>		<input type="checkbox"/>		
		% CLOUD COVER	25		25		AIR TEMPERATURE
		CLEAR/SUNNY	<input type="checkbox"/>		<input type="checkbox"/>		75 °F
					OTHER		



<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p> <p style="text-align: center;">CHANNEL TOP WIDTH (E)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 20%;">RIGHT BANK (FACE DOWNSTREAM)</td> <td style="width: 15%;">HORIZONTAL (A)</td> <td style="width: 15%;">3.00</td> <td style="width: 50%;">FT.</td> </tr> <tr> <td>VERTICAL (B)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td rowspan="2">LEFT BANK (FACE DOWNSTREAM)</td> <td>HORIZONTAL (C)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td>VERTICAL (D)</td> <td>3.00</td> <td>FT.</td> </tr> <tr> <td rowspan="6" style="text-align: center;">CHANNEL DIMENSIONS</td> <td>TOP WIDTH (E)</td> <td>9.00</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>3.00</td> <td>FT.</td> </tr> <tr> <td>ORDINARY HIGH WATER MARK (H)</td> <td>-</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)	3.00	FT.	VERTICAL (B)	3.00	FT.	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.	VERTICAL (D)	3.00	FT.	CHANNEL DIMENSIONS	TOP WIDTH (E)	9.00	FT.	BOTTOM WIDTH (F)	3.00	FT.	OVERALL DEPTH (G)	3.00	FT.	ORDINARY HIGH WATER MARK (H)	-	FT.	FLOW DEPTH (I)	0.00	FT.	APPROX. SURFACE VELOCITY	0.00	FT./SEC
RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)		3.00	FT.																														
	VERTICAL (B)	3.00	FT.																															
LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	3.00	FT.																															
	VERTICAL (D)	3.00	FT.																															
CHANNEL DIMENSIONS	TOP WIDTH (E)	9.00	FT.																															
	BOTTOM WIDTH (F)	3.00	FT.																															
	OVERALL DEPTH (G)	3.00	FT.																															
	ORDINARY HIGH WATER MARK (H)	-	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 checked="" type="checkbox"/> MIXTURE OF ORIGINS		
	<input type="checkbox"/> SWAMP AND BOG	<input type="checkbox"/> OTHER		

STREAM ID: *S - SRC - 98*

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 checked="" 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? <i>SUGAR MAPLE, SOLEDADO SP., C. MAPLE SP.</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~200</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>9.00</i> FT.	<input type="checkbox"/> OPEN	<input checked="" type="checkbox"/> PARTLY OPEN <input type="checkbox"/> PARTLY SHADED <input type="checkbox"/> SHADED
LARGE WOODY DEBRIS	LWD	<i>-</i>	FT. ²	
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²	
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>CARLEK SP.</i> PORTION OF THE REACH WITH AQUATIC VEGETATION <i>~70</i> %			
WATER QUALITY	TEMPERATURE	°C	WATER ODORS	
	SPEC. CONDUCTANCE		<input type="checkbox"/> NORMAL/NONE	<input type="checkbox"/> SEWAGE
SEDIMENT/SUBSTRATE	DISSOLVED OXYGEN		<input type="checkbox"/> PETROLEUM	<input type="checkbox"/> CHEMICAL
	pH		<input type="checkbox"/> FISHY	<input type="checkbox"/> OTHER
INORGANIC SUBSTRATE COMPONENTS (ADD TO 100%)	TURBIDITY		WATER SURFACE OILS	
	WQ INSTRUMENT USED		<input type="checkbox"/> SLICK	<input checked="" type="checkbox"/> SHEEN - Oily
ORGANIC SUBSTRATE COMPONENTS (MAY ADD TO LESS THAN 100%)			<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
			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 type="checkbox"/> SAWDUST
			<input type="checkbox"/> PAPER FIBER	<input type="checkbox"/> SAND
			<input type="checkbox"/> RELICT SHELLS	
			<input checked="" type="checkbox"/> OTHER	<i>RDWY. DEBRIS / TRASH</i>
			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)	<i>~70</i>
BOULDER	256 MM (10"+)	<i>100</i>			
COBBLE	64 - 256 MM (2.5 - 10")	-	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
GRAVEL	2 - 64 MM (0.1 - 2.5")	-			
SAND	0.06 - 0.2 MM (GRITTY)	-			
SILT	0.004 - 0.06 MM	-	MARL	GREY, SHELL FRAGMENTS	-
CLAY	<0.004 MM (SLICK)	-			



S-SRC-98 overview, facing upstream.



S-SRC-98 overview, facing downstream.

STREAM S-SRC-99

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SLC-99			CLIENT	PTC	
STREAM CLASS	INTERMITTENT			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	08.13.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	13:54			
LATITUDE		LONGITUDE		RIVER BASIN	RAYSTOWN BR., JANEATA 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	75	°F
	<input type="checkbox"/>	RAIN (STEADY RAIN)		<input type="checkbox"/>				
	<input type="checkbox"/>	SHOWERS (INTERMITTENT)		<input type="checkbox"/>		OTHER		
	<input checked="" type="checkbox"/>	25	% CLOUD COVER	25			<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)

REFER TO S-SLC-98

<p>FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.</p>	RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00	FT.
			VERTICAL (B)	2.50
	LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.
		VERTICAL (D)	2.50	FT.
CHANNEL DIMENSIONS		TOP WIDTH (E)	8.00	FT.
		BOTTOM WIDTH (F)	4.00	FT.
		OVERALL DEPTH (G)	2.50	FT.
		ORDINARY HIGH WATER MARK (H)	1.75	FT.
		FLOW DEPTH (I)	0.25	FT.
		APPROX. SURFACE VELOCITY	45.00	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	STORMWATER	
	<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: *5-SRC-99*

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 type="checkbox"/> NO EVIDENCE	<input checked="" 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 type="checkbox"/> NONE	<input checked="" 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>SUGAR MAPLE, GREEN ASH</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>2300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>8.00</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>100</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> %		
TAXA PRESENT	<i>-</i>	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	<i>-</i>	FT. ²	
	DENSITY OF LWD	<i>-</i>	FT. ² /MI. ²	
AQUATIC VEGETATON	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	
	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"/> 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 checked="" type="checkbox"/> OTHER	<i>Hwy. Debris / Trash</i>	
	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>~10</i>
BOULDER	256 MM (10"+)	<i>5</i>			
COBBLE	64 - 256 MM (2.5 - 10")	<i>40</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>5</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-99 overview, facing upstream.



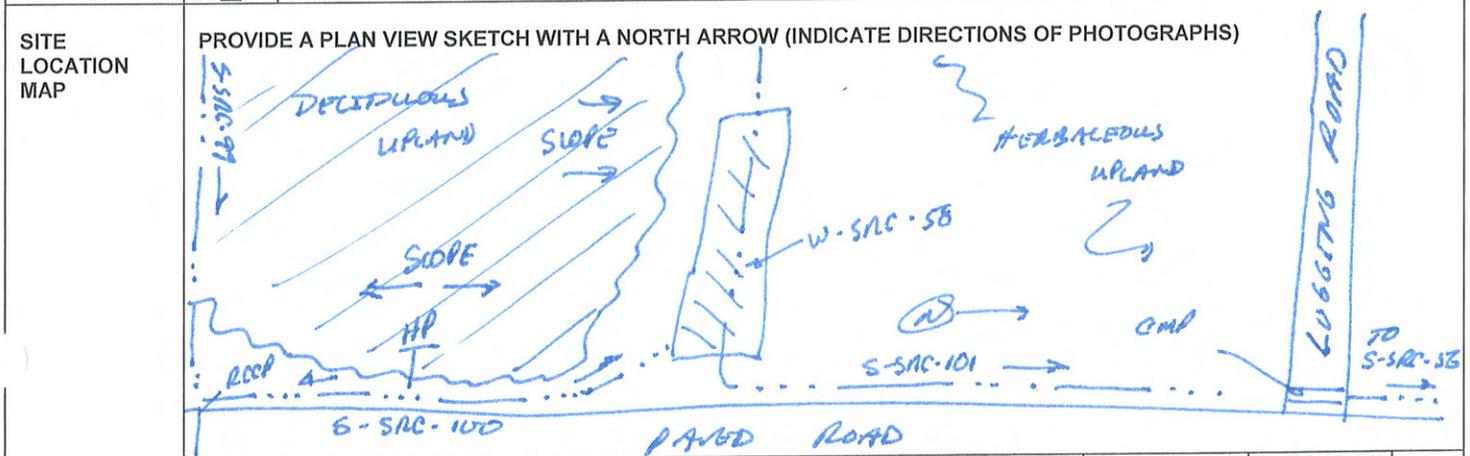
S-SRC-99 overview, facing downstream.

STREAM S-SRC-100

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S-SRC-100			CLIENT	PTC	
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel	
INVESTIGATORS	SAC KLE	DATE	08.13.12	MM/DD/YR	LOCATION	Somerset County, PA
		TIME	14:05	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 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"/>	25 % CLOUD COVER	25	<input checked="" type="checkbox"/>			
<input type="checkbox"/>	CLEAR/SUNNY	<input type="checkbox"/>				



FOR LINEAR PROJECTS, PROVIDE DIMENSIONS AT THE CENTERLINE OF THE STREAM CROSSING.		RIGHT BANK (FACE DOWNSTREAM)	HORIZONTAL (A)	2.00	FT.
<p>CHANNEL TOP WIDTH (E)</p> <p>CHANNEL DEPTH (G)</p> <p>FLOW DEPTH (I)</p> <p>BOTTOM WIDTH (F)</p> <p>ORDINARY HIGH WATER MARK (H)</p>		VERTICAL (B)	2.00	FT.	
		LEFT BANK (FACE DOWNSTREAM)	HORIZONTAL (C)	2.00	FT.
<p>CHANNEL DIMENSIONS</p>		VERTICAL (D)	2.00	FT.	
		TOP WIDTH (E)	6.00	FT.	
		BOTTOM WIDTH (F)	2.00	FT.	
		OVERALL DEPTH (G)	2.00	FT.	
		ORDINARY HIGH WATER MARK (H)	—	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 STORMWATER		
<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-100*

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> NO EVIDENCE	<input checked="" type="checkbox"/> SOME POTENTIAL SOURCES
	<input type="checkbox"/> FIELD/PASTURE	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> OBVIOUS SOURCES	
	<input type="checkbox"/> AGRICULTURAL	<input checked="" type="checkbox"/> OTHER	LOCAL WATERSHED EROSION	
	<input type="checkbox"/> RESIDENTIAL	<i>ROADWAY</i>	<input type="checkbox"/> NONE	<input checked="" 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 checked="" type="checkbox"/> GRASSES	<input type="checkbox"/> HERBACEOUS
	DOMINANT SPECIES PRESENT? <i>SOLIDAGO SP., CATECH SP.</i>			
INSTREAM FEATURES	STUDY LENGTH	<i>~300</i> FT.	CANOPY COVER	
	STREAM WIDTH	<i>6.00</i> FT.	<input checked="" type="checkbox"/> OPEN	<input type="checkbox"/> PARTLY OPEN <input 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 type="checkbox"/> POOL		
TAXA PRESENT	<input checked="" type="checkbox"/> NO	CHANNELIZED	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
		DAM PRESENT	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
LARGE WOODY DEBRIS	LWD	-	FT. ²	
	DENSITY OF LWD	-	FT. ² /MI. ²	
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"/> 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 checked="" 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>~25</i>
BOULDER	256 MM (10"+)	<i>100</i>			
COBBLE	64 - 256 MM (2.5 - 10")	-			
GRAVEL	2 - 64 MM (0.1 - 2.5")	-	MUCK - MUD	BLACK, VERY FINE ORGANIC (FPOM)	-
SAND	0.06 - 0.2 MM (GRITTY)	-			
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
A115	PTC ALLEGHENY TUNNEL			08.12.12	S-SRC-100	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLG		S-SRC-100 UNT TO RAHSDOWN 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. Ensure the sums of % Riparian Blocks equal 100

Right Side	% Riparian Area >	1.00								1.00 0%		
	Score >	13								13		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	1.00								1.00 0%	Rt Sub-Index > 13 0.00	CI
	Score >	6								6	Lt Sub-Index > 0.20 0.00	0.48

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 >	13								13		
CI = Sum (Rt and Lt sub-Indexes)/2												
Left Side	% Riparian Area >	0.50	0.50							1.00 0%	Rt Sub-Index > 0.61 0.00	CI
	Score >	6	2							4	Lt Sub-Index > 0.10 0.00	0.43

Comments:
 ZOI CONSISTS OF SPARSE UPLAND DELICIOUS AND ROADSIDE HERBACEOUS.

RIPARIAN ECOTONE CONDITION INDEX		RECI
NOTE: The CIs and RECI should be rounded to 2 decimal places.		0.46
THE RIPARIAN ECOTONE CONDITION INDEX (RECI) RECI = (Sum of CIs)/2		0.46



S-SRC-100 overview, facing upstream.



S-SRC-100 overview, facing downstream.

STREAM S-SRC-101

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

STREAM NAME	S. SAC-101			CLIENT	PTC
STREAM CLASS	EPHEMERAL			PROJECT	Allegheny Tunnel
INVESTIGATORS	SAC KLG	DATE	08.13.12	MM/DD/YR	LOCATION
		TIME	14:50	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 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"/>	% CLOUD COVER 25	<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)

Refer to S. SAC-100.

<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>1.50</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>7.00</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>0.50</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)	7.00	FT.	BOTTOM WIDTH (F)	4.00	FT.	OVERALL DEPTH (G)	1.50	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)		1.50	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)	7.00	FT.																															
	BOTTOM WIDTH (F)	4.00	FT.																															
	OVERALL DEPTH (G)	1.50	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 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	STORMWATER	
	<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-101

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

WATERSHED FEATURES	PREDOMINANT SURROUNDING LANDUSE		LOCAL WATERSHED NPS POLLUTION	
	<input type="checkbox"/> FOREST	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> NO EVIDENCE	<input checked="" type="checkbox"/> SOME POTENTIAL SOURCES
	<input checked="" 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 type="checkbox"/> NONE	<input checked="" 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? <u>SOLIDAGO, TENACIS, CARYX</u>			
INSTREAM FEATURES	STUDY LENGTH	<u>400</u> FT.	CANOPY COVER	
	STREAM WIDTH	<u>7.00</u> FT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	STUDY REACH AREA		OPEN	PARTLY OPEN
	EST. DRAINAGE AREA		PARTLY SHADED	SHADED
MACROINVERTEBRATES PRESENT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	PROPERTIES OF REACH, STREAM MORPHOLOGY TYPES	
TAXA PRESENT			<input type="checkbox"/> RIFLE	<input type="checkbox"/> RUN
			<input type="checkbox"/> POOL	<input type="checkbox"/>
			CHANNELIZED	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
			DAM PRESENT	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
LARGE WOODY DEBRIS	LWD	<u>-</u>	FT. ²	
	DENSITY OF LWD	<u>-</u>	FT. ² /MI. ²	
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>CARYX, TENACIS, SOLIDAGO</u>			
	PORTION OF THE REACH WITH AQUATIC VEGETATION <u>80</u> %			
WATER QUALITY	TEMPERATURE		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		
		<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		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 checked="" type="checkbox"/> OTHER	<u>ROADWAY DEBRIS / WASTE</u>
	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)	<u>250</u>
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")	<u>20</u>			
SAND	0.06 - 0.2 MM (GRITTY)	<u>20</u>			
SILT	0.004 - 0.06 MM	<u>60</u>	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 ALLEGHENY TUNNEL			08-13-12	S-SRC-101	
Name(s) of Evaluator(s)		Stream Name and Information				
SRC, KLE		S-SRC-101 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
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 >	6								6			
CI = Sum (Rt and Lt sub-Indexes)/2													
Left Side	% Riparian Area >	1.00								1.00	0%	Rt Sub-Index >	0.5000
	Score >	6								6		Lt Sub-Index >	0.5000
CI													
0.30													

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
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 >	0.50	0.50							1.00	0%		
	Score >	6	2							4			
CI = Sum (Rt and Lt sub-Indexes)/2													
Left Side	% Riparian Area >	0.50								1.00	0%	Rt Sub-Index >	0.2000
	Score >	6								6		Lt Sub-Index >	0.3000
CI													
0.25													

Comments:

ZOI CONSISTS OF UNMAINTAINED HERBACEOUS AND
ROADSIDE HERBACEOUS.

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 CIs)/2	0.30



S-SRC-101 overview, facing upstream.



S-SRC-101 overview, facing downstream.