| *SITE VERIFICATION* >>>>

| Reviewers Initials | | *ACTIVITIES AND DISTURBANCES >>>>

| *PHYSICAL & SEDIMENT CHARACTERIZATION>>>

Reviewers Initials		*FIELD WATER & RIPARIAN VEGETATION ZONE MEASURES>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*

WQ Sample Location	☐ Mid-Stream ☐ Bank (☐ Left ☐ Right) ☐ Thalweg (☐ Left ☐ Middle ☐ Right) ☐ Left Channel ☐ Right Channel ☐ Cross Section ☐ Other:	WQ Type	☐ Single ☐ Profile ☐ Other:
Sonde Method	☐ Grab ☐ Sample Tube ☐ Bucket	Lab Water Method	☐ Grab ☐ Sample Tube ☐ Bucket

Flag	Physicochemical Parameters (for a Single Water Quality Sample)		Seasonal Water Level		Water Odors		Surface "Oils"		Turbidity	
		Temperature °C		Below Normal		Normal		None		Clear
		pH (std. Units)		Normal		Sewage (Not Septic)		Flecks		Slightly Turbid
		Dissolved Oxygen (mg/L)		Above Normal		Petroleum		Sheen		Moderately Turbid
		Conductivity (μmhos/cm)		Flooding		Chemical		Globs		Highly Turbid
Sonde I.D. #:_____ If any problems occur with the Water Meter or any readings are suspect, record notes in the space to the right.			Notes:			Anaerobic (septic)		Slick	Water color:	
						Other:				
					Foam/Suds (Rate 0-4 or NR)					

ABOVE: Record readings in box for corresponding physicochemical parameter. Insert a √ in the box for other categories.

Precipitation Status and History

Current		Past 24 Hours (If Known)		Major Rain Event in past week?	☐ Yes ☐ No

If it is raining or has rained recently, which of the following best describes the peak runoff (flush) condition of the stream at the site when water samples were collected?

< 1 Hour		1 to 4 Hours		4 to 12 Hours		12 to 24 Hours		>24 Hours		Unknown	

Is the stream level rising, falling, or at baseflow at the time of visit? ☐ Baseflow ☐ Rising ☐ Falling

Stream Bank/Riparian Buffer Zone Vegetation/Cover Type

→ → What is the dominant vegetation type in the reach?
☐ Deciduous ☐ Coniferous (*i.e.*, Spruce, Pine, Hemlock, Rhododendron)
☐ Mixed Deciduous (>10-49% Coniferous) ☐ Mixed Coniferous (>10-49% Deciduous)

Score Codes: 0=Absent (0%) 1=Sparse (0-10%) 2=Moderate (10-40%) 3=Heavy (40-75%) 4=Very Heavy (>75%)

Left & Right Bank While Facing Down-Stream	*Determined Within The 1st 18 m (60 Ft) From Stream Edge*	Canopy (>5 M High) (>15 Feet)	Understory (0.5 – 5 M High) (1.5-15 Feet)	Ground Cover (<0.5 M High) (≈1.5 Feet)	Bare / Barren Soil
		Big Trees such as Sycamore, Oaks, Maples, Box Elder, River Birch, Hemlock	*Small trees and shrubby Vegetation such as Willow, Alder, Knotweed (blue devil), Rhododendron, Wingstem*	*Ferns, Grasses, Mosses, Wildflowers*	*Exposed soil surface, Readily erodible – not rock faces or asphalt roads*
LEFT (18 m) (≈60 ft)					
RIGHT (18 m) (≈60 ft)					

Stream Surface Shading (%)	Indicate % based on cloudless day in summer at noon. Place a √ in box that applies.						
Fully Exposed (0-25%)		Partly Shaded (25-50%)		Partly Exposed (50-75%)		Fully Shaded (75-100%)	

General Comments (include land cover types outside of 18 m zone on left and right side that may impact water quality at the stream site). ***Provide your impression of the buffering capacity of the riparian zone in the 100 m reach including width, allochthonous input, topography, and plant composition.***

Amphibian pool in riparian area?	☐ Vernal ☐ Mud Puddle ☐ Sed. Pond ☐ Farm Pond ☐ Ditch ☐ Lake ☐ Cattail Wetland ☐ Other Comments:

| *RAPID HABITAT ASSESSMENT*: **RIFFLE/RUN**>>>

| Reviewers Initials | | *RAPID HABITAT ASSESSMENT:* **RIFFLE/RUN >>>>

BENTHIC, AESTHETIC, & REMOTENESS RATINGS & EXTRA SPACE >>>>>>>>>>>>>>>>>>>	**Reviewers Initials**	
AN-Code		**Date**

PARAMETER	Optimal	Sub-optimal	Marginal	Poor
BENTHIC MACRO-INVERTEBRATE SUBSTRATE	Preferred substrate abundant; stable, & at full colonization potential (riffles well developed & dominated by cobble; substrate not new or transient).	Substrate adequate for maintenance of populations; abundance of cobble with coarse gravel &/or boulders common; small areas of new &/or transient substrate particles (sand and fine gravel) may be present.	Preferred substrate uncommon; some cobble present but gravel or large boulders & bedrock prevalent; transient substrate areas may be frequent.	Preferred substrate virtually absent; gravel or large boulders & bed – rock dominant; transient areas may be dominant.
	Rate for entire reach even if the reach is not representative of benthic sample area			
SCORE:	**20 19 18 17 16**	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
TRASH INDEX	Little or no evidence of human refuse present.	Human refuse present in small amounts.	Human refuse present in Moderate amounts.	Human refuse abundant and unsightly.
SCORE:	**20 19 18 17 16**	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
REMOTENESS RATING	Stream assessment site more than ¼ mile from nearest Road; access difficult and little or no evidence of human disturbance.	Stream assessment site within ¼ mile of roadside; site with moderately wild character.	Stream within ¼ mile of roadside; development activities evident.	Segment immediately adjacent to roadside access; visual, olfactory, and/or auditory displeasure experienced.
SCORE:	**20 19 18 17 16**	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**

Is Site A Potential Reference?	☐ **Yes** ☐ **No (Consider Water Chemistry, Benthos, Habitat, Human Disturbance, Location (*i.e.*, Ecoregion), Level I vs. Level II vs. Level III Reference Condition, *etc.*)**
If not a Potential Reference, why?	
Stressor Info (Check all that apply and only those that are definite stressors).	☐ **Sediment** ☐ **Fecal** ☐ **Nutrients** ☐ **Metals** ☐ **pH** ☐ **Sulfate** ☐ **Conductivity** ☐ **Other:**
Please check Other if the site is located 1-2 miles downstream of any impoundment (*e.g.*, lakes, ag. or mining ponds, flood control dams, beaver dams, low water ford/bridge dams) or a valley fill (mining or road) structures. Be sure to include type of structure (with type of impoundment release), distance upstream to the structure, number and size of tributaries in between that may alter the water chemistry (including dilution effects), and size of impoundment in m x m.	☐ **Impoundment:** ☐ **Lake** ☐ **Ag Pond** ☐ **Mining Pond** ☐ **Flood Control** ☐ **Beaver** ☐ **Instream Pool** ☐ **Concrete Low Water Ford/Bridge** **Impoundment Release Type:** ☐ **Bottom** ☐ **Spillover** ☐ **Valley Fill:** ☐ **Mining** ☐ **Road (i.e., refuse from highway construction)**
	Distance Upstream from Sample Site to Structure (Miles)
	Number of Tributaries Between Structure and Sample Site
	Size of Impoundment (m x m)

EXTRA SPACE FOR SPILL-OVER COMMENTS AND NOTES BELOW. When using this space, please indicate from which section of the form this is a continuation. For example, "More Sediment Notes" or "More Stream Reach Activities & Disturbances Notes" will allow the data entry person to associate this to the appropriate subform in the database. Also be sure to indicate that there are additional notes here under the appropriate section (*e.g.*, "More Notes on Page 7").

| Reviewers Initials | | *WILDLIFE OBSERVATIONS* >>>>

BENTHIC MACROINVERTEBRATE & PERIPHYTON/ALGAE/AQ. PLANT INFO>>>>>>>>>>>>>			**Reviewers Initials**	
AN-Code			**Date**	

Benthic sample collected?	☐ **Yes** ☐ **No**	**If no, why?**					
Benthic collection device	☐ **Kicknet** ☐ **D-net** ☐ **Hand**		**Benthic habitat type & #**	***Riffles***		***Runs***	
Benthic sample comparability	**Was benthic sample comparable with respect to riffle/run depth and velocity?**						☐ **Yes** ☐ **No**
Is there evidence that the stream channel was scoured by recent flooding or high flows?							☐ **Yes** ☐ **No**
Is it possible that sample areas were dry or partially dry for an extended period before sample was taken?							☐ **Yes** ☐ **No**
Is there evidence that the stream is "wet-weather" and flowing only in response to recent rainfall?							☐ **Yes** ☐ **No**
Benthic kick area depths	**m**	**m**	**m**	**m**			

Use the space below to describe the site and explain responses to the previous questions. What organisms were put in the jar? PLEASE NOTE ANY FISH, TROUT, OR SALAMANDERS RELEASED FROM THE BENTHIC SAMPLE ON PAGE 8!!!!

Inorganic Substrate (1 m^2 Of Kicked Substrate)	**Class Codes**	**Size Class**	**% Composition**
Bedrock	**BR**	**Smooth surface rock/hardpan (>4000 mm – bigger than a car)**	**%**
Boulder (BL)	**BL**	**Basketball to car (>250-4000 mm)**	**%**
Cobble (CB)	**CB**	**Tennis ball to basketball (>64-250 mm)**	**%**
Coarse Gravel (CG)	**CG**	**Marble to tennis ball (>16-64 mm)**	**%**
Fine Gravel (FG)	**FG**	**Ladybug to marble (>2-16 mm)**	**%**
Sand (SA)	**SA**	**Gritty – up to ladybug (>0.06-2 mm)**	**%**
Silt & Fines (ST)	**ST**	**Fine – not gritty (<0.06 mm)**	**%**
Clay (CL)	**CL**	**Slick/ hard clay or hard-pan clay**	**%**

Enter estimated % composition for each substrate type. *****MACS SITES: estimate over entire 100 meter stream reach.****

Describe the benthic sampling substrate quality in terms of relative sizes (e.g., small-sized vs. large-sized cobble or boulders), shapes (globular vs. flat vs. angular), texture (e.g., rough vs. smooth bedrock), layering (i.e., was the cobble stacked) and embeddedness (embedded by pea gravel vs. sand/silt). Also mention any unusual substrate features (e.g., trash or unnatural substrate that was sampled as substrate) and provide general comments about the benthic sample substrate.

Indicate abundance of each: 0=None, 1=Low, 2=Moderate, 3=High, 4=Extreme, NR=Not Rated	**Periphyton (*Brown-slick; Diatoms*)**		**Filamentous Algae (*Green*)**		**Aquatic Vascular Plants**		**Aquatic Mosses**	

Periphyton/Algae/Aquatic Plants & Mosses Notes:

Reviewers Initials		*LANDOWNER/STAKEHOLDER INFORMATION & PHOTOS >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*	
Name		**Stream Data Requested**	**[ ] Yes [ ] No**
		WS Report Requested	**[ ] Yes [ ] No**
Address		**Phone:**	**( )**
		ALT #:	**( )**

Other Pertinent Landowner Information And Comments (alternate landowner or addresses, etc.). Discuss the accessibility to the site including posted property, fenced, beside road, long walk over treacherous terrain, 4 x 4 needed, get key from landowner, etc.

Check all that apply: ☐ Easy Access ☐ Difficult Access ☐ Private Property ☐ Posted ☐ Fenced ☐ Gated ☐ Get Key from Landowner ☐ Beside Road ☐ Short Hike ☐ Long Hike ☐ 4x4 Needed ☐ Other (explain)

Photography Log >>>>>>>>>>>>>>>>>>	**Camera Type**		**Camera Number**	

#	Photo ID (office)	Disk Photo # (field)	Stream Name and/or AN-Code	Photo Description (Use Key Words)	Date	Photographer
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						