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ENVIRONMENTAL MONITORING AND ASSESSMENT PROGRAM-SURFACE WATERS:

FIELD OPERATIONS AND METHODS FOR MEASURING THE ECOLOGICAL CONDITION OF WADEABLE STREAMS

Edited by

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APPENDIX C

FIELD DATA FORMS

Copies of field data forms are arranged according the general order of their use at each stream site:

1. Verification Form
2. Sample Collection Form
3. Field Measurement Form
4. Channel/Riparian Cross-Section & Thalweg Profile Form
5. Slope and Bearing Form
6. Vertebrate Collection Form
7. Vertebrate Length Recording Form
8. Rapid Habitat Assessment Form (Riffle/Run Prevalent)
9. Rapid Habitat Assessment Form (Pool/Glide Prevalent)
10. Assessment Form

Electronic versions of the forms may be available through the EMAP-Surface Waters Technical Director, U.S. EPA, 200 SW 35th St, Corvallis, OR 97333.

Reviewed by (initial): _____

VERIFICATION FORM - STREAMS/RIVERS

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

STREAM/RIVER VERIFICATION INFORMATION

STREAM/RIVER VERIFIED BY (X all that apply) : G GPS G LOCAL CONTACT G SIGNS G ROADS G TOPO. MAP

G OTHER (DESCRIBE HERE): G NOT VERIFIED (EXPLAIN IN COMMENTS)

COORDINATES	LATITUDE (dd mm ss) North	LONGITUDE (ddd mm ss) West	TYPE OF GPS FIX	Are GPS Coordinates w/i 10 Sec. of map?
MAP:	" ' " __ __ __ __ __ __	" ' " __ __ __ __ __ __	G 2D	G YES
GPS:	" ' " __ __ __ __ __ __	" ' " __ __ __ __ __ __	G 3D	G NO

INDEX SITE STATUS - X ONE BOX FROM ONE SECTION ONLY

SAMPLEABLE

G REGULAR - WADEABLE

G REGULAR - NOT WADEABLE

G INTERMITTENT - DRY SPOTS ALONG REACH

G DRY - NO WATER ANYWHERE ALONG REACH

G ALTERED - STREAM/RIVER PRESENT BUT NOT AS ON MAP

G OTHER (EXPLAIN IN COMMENTS)

NON-SAMPLEABLE (NO SAMPLE TAKEN)

G NO CHANNEL OR WATERBODY PRESENT

G IMPOUNDED (UNDERNEATH LAKE/POND)

G WETLAND (NO DEFINABLE CHANNEL)

NO ACCESS

G ACCESS PERMISSION DENIED

G INACCESSIBLE (UNABLE TO REACH SITE)

DIRECTIONS TO STREAM/RIVER SITE

GENERAL COMMENTS

Reviewed by (initial): _____

RECORD INFORMATION USED TO DEFINE LENGTH OF REACH, AND SKETCH GENERAL FEATURES OF REACH ON REVERSE SIDE.

VERIFICATION FORM - STREAMS/RIVERS (continued)

SITE NAME: **DATE: / / VISIT: G1 G2 ___**

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8**

STREAM/RIVER REACH DETERMINATION

CHANNEL WIDTH USED TO DEFINE REACH (M) (XX):	DISTANCE (M) FROM X-SITE		COMMENT
	UPSTREAM LENGTH	DOWNSTREAM LENGTH	

ARROW INDICATES NORTH

Reviewed by (initial): _____

SAMPLE COLLECTION FORM - STREAMS

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

COMPOSITE BENTHOS SAMPLES

SAMPLE ID (BARCODE)	HABITAT (X ONE)		NO. OF JARS	FLAG	COMMENTS
	R	P			
___ ___ ___ ___ ___ ___					
___ ___ ___ ___ ___ ___					

STATION	A	B	C	D	E	F	G	H	I	J	K
RIFFLE OR POOL - (X ONE) 6		GR GP	GR GP	GR GP	GR GP	GR GP	GR GP	GR GP	GR GP	GR GP	
LEFT, CENTER, OR RIGHT - (X ONE) 6		GL GC GR	GL GC GR	GL GC GR	GL GC GR	GL GC GR	GL GC GR	GL GC GR	GL GC GR	GL GC GR	

COMPOSITE PERIPHYTON SAMPLES		HABITAT TYPE (X) 6	G RIFFLE G POOL G OTHER
SAMPLE ID (BARCODE) 6	___ ___ ___ ___ ___ ___	COMPOSITE VOLUME 6	___ ___ ___ ___ mL

ASSEMBLAGE ID (50-mL TUBE)	CHLOROPHYLL (GF/F FILTER)	BIOMASS (TARED FILTER)		APA SAMPLE (50-mL TUBE)
SUB. SAMPLE VOL.	VOL. FILTERED	FILTER NO.	VOL. FILTERED	SUB. SAMPLE VOL.
___ ___ mL	___ ___ ___ ___ mL		___ ___ ___ ___ mL	___ ___ ___ ___ mL

COMPOSITE PERIPHYTON SAMPLES		HABITAT TYPE (X) 6	G RIFFLE G POOL G OTHER
SAMPLE ID (BARCODE) 6	___ ___ ___ ___ ___ ___	COMPOSITE VOLUME 6	___ ___ ___ ___ mL

ASSEMBLAGE ID (50-mL TUBE)	CHLOROPHYLL (GF/F FILTER)	BIOMASS (TARED FILTER)		APA SAMPLE (50-mL TUBE)
SUB. SAMPLE VOL.	VOL. FILTERED	FILTER NO.	VOL. FILTERED	SUB. SAMPLE VOL.
___ ___ mL	___ ___ ___ ___ mL		___ ___ ___ ___ mL	___ ___ ___ ___ mL

COMMENTS:

Reviewed by (initial): _____

Flag codes: K= Sample not collected; U= Suspect sample; F1, F2, etc.= misc. flag assigned by field crew. Explain all flags in Comment sections.

Reviewed by (initial): _____

SAMPLE COLLECTION FORM - STREAMS (continued)

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

CHEMISTRY AND MICROBIAL WATER SAMPLE (Chem: 4-L Cubitainer and 2 Syringes, Micro: Glass Bottle)

	SAMPLE ID (BARCODE)	TRANSECT	FLAG	COMMENTS
CHEMISTRY	___ ___ ___ ___ ___ ___			
	___ ___ ___ ___ ___ ___			

SEDIMENT TOXICITY SAMPLES

SAMPLE ID (BARCODE)	FLAG	COMMENTS
___ ___ ___ ___ ___ ___		

FISH TISSUE SAMPLES - PRIMARY SAMPLE (min. 50g total wgt)

SAMPLE ID (BARCODE) 6 ___ ___ ___ ___ ___ ___

LINE	SPECIES CODE	COMMON NAME	NUMBER OF INDIVIDUALS	FLAG
P1	___ ___ ___ ___ ___ ___			
	___ ___ ___ ___ ___ ___			

IS COMPOSITE SAMPLE COMPOSED OF INDIVIDUALS COLLECTED FROM THROUGHOUT REACH? (X) 6 G YES G NO

IF NO, EXPLAIN:

FISH TISSUE SAMPLES - SECONDARY SAMPLE (where available; 5 individuals)

SAMPLE ID (BARCODE) 6 ___ ___ ___ ___ ___ ___

LINE	SPECIES CODE	COMMON NAME	TOTAL LENGTH (MM)	FLAG
S1	___ ___ ___ ___ ___ ___			
S2	___ ___ ___ ___ ___ ___			
S3	___ ___ ___ ___ ___ ___			
S4	___ ___ ___ ___ ___ ___			
S5	___ ___ ___ ___ ___ ___			

IS COMPOSITE SAMPLE COMPOSED OF INDIVIDUALS COLLECTED FROM THROUGHOUT REACH? (X) 6 G YES G NO

IF NO, EXPLAIN:

LINE	COMMENT OR FLAG EXPLANATION FOR FISH TISSUE

Reviewed by (initial): _____

Flag codes: K= Sample not collected; U= Suspect sample; F1, F2, etc.= misc. flag assigned by field crew. Explain all flags in Comments sections.

Reviewed by (initial): _____

FIELD MEASUREMENT FORM - STREAMS/RIVERS

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

WEATHER CONDITIONS (X)

CLOUD COVER	G < 5%	G 5-25%	G 25-50%	G 50-75%	G >75%
PRECIPITATION	G NONE	G LIGHT	G MODERATE	G HEAVY	
PREVIOUS PRECIPITATION (24 H)	G NONE	G LIGHT	G MODERATE	G HEAVY	
AIR TEMPERATURE XX	___ ___ °C				

IN SITU MEASUREMENTS

STATION ID: _____ Assume X-site unless marked

		FLAG	COMMENTS
QCCS COND µS/CM	___ ___ ___ ___		
STREAM/RIVER COND µS/CM	___ ___ ___ ___		
STREAM/RIVER DO MG/L	___ ___ . ___		
STREAM/RIVER TEMP °C	___ ___ . ___		

STREAM/RIVER METABOLISM DETERMINATION

INITIAL O_2 (MG/L)	INITIAL INCUBATION TEMP. (°C)	INCUBATION TIME (24-HR TIME) START (HH:MM)	INCUBATION TIME (24-HR TIME) FINISH (HH:MM)	DURATION OF INCUBATION (HH:MM)	FLAG	COMMENTS
___ ___ . ___	___ ___ . ___	___ ___ : ___ ___	___ ___ : ___ ___	___ ___ : ___ ___		

SAMPLE ID (BARCODE)	FINAL O_2 (MG/L)	FLAG	COMMENTS
___ ___ ___ ___ ___ ___	___ ___ . ___		
___ ___ ___ ___ ___ ___	___ ___ . ___		
___ ___ ___ ___ ___ ___	___ ___ . ___		
___ ___ ___ ___ ___ ___	___ ___ . ___		
___ ___ ___ ___ ___ ___	___ ___ . ___		
___ ___ ___ ___ ___ ___	___ ___ . ___		

OXYGEN METER CALIBRATION INFORMATION

MEMBRANE CHECK G ELECTRONIC ZERO G RED LINE: G

CALIBRATION CHAMBER TEMPERATURE: °C	SATURATED O_2 @ TEMP.: MG/L
STATION ELEVATION (FROM TOPO. MAP OR ALTIMETER): FT	ELEVATION CORRECTION FACTOR: ×
The calibration value is obtained by multiplying the saturated DO concentration times an elevation correction factor (obtained from the tables on the back of the YSI meter). Adjust the meter reading to the calibration value.	CALIBRATION VALUE: MG/L
	COMMENTS:

Reviewed by (initial): _____

Flag Codes: K = no measurement or observation made; U= suspect measurement or observation; Q = unacceptable QC check associated with measurement; F1, F2, etc. = miscellaneous flags assigned by each field crew. Explain all flags in comments section.

Reviewed by (initial): _____

FIELD MEASUREMENT FORM - STREAMS (continued)

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

STREAM DISCHARGE

G VELOCITY AREA

	DIST. FROM BANK (CM)	VELOCITY (FT/S) XX.X	DEPTH (FEET) XX.X	FLAG
1	___ ___ ___	___ ___ . ___	___ ___ . ___	
2	___ ___ ___	___ ___ . ___	___ ___ . ___	
3	___ ___ ___	___ ___ . ___	___ ___ . ___	
4	___ ___ ___	___ ___ . ___	___ ___ . ___	
5	___ ___ ___	___ ___ . ___	___ ___ . ___	
6	___ ___ ___	___ ___ . ___	___ ___ . ___	
7	___ ___ ___	___ ___ . ___	___ ___ . ___	
8	___ ___ ___	___ ___ . ___	___ ___ . ___	
9	___ ___ ___	___ ___ . ___	___ ___ . ___	
10	___ ___ ___	___ ___ . ___	___ ___ . ___	
11	___ ___ ___	___ ___ . ___	___ ___ . ___	
12	___ ___ ___	___ ___ . ___	___ ___ . ___	
13	___ ___ ___	___ ___ . ___	___ ___ . ___	
14	___ ___ ___	___ ___ . ___	___ ___ . ___	
15	___ ___ ___	___ ___ . ___	___ ___ . ___	
16	___ ___ ___	___ ___ . ___	___ ___ . ___	
17	___ ___ ___	___ ___ . ___	___ ___ . ___	
18	___ ___ ___	___ ___ . ___	___ ___ . ___	
19	___ ___ ___	___ ___ . ___	___ ___ . ___	
20	___ ___ ___	___ ___ . ___	___ ___ . ___	

G TIMED FILLING

REPEAT	VOL. (L) XX.X	TIME (S)	FLAG
1	___ ___ . ___		
2	___ ___ . ___		
3	___ ___ . ___		
4	___ ___ . ___		
5	___ ___ . ___		

G NEUTRALLY BUOYANT OBJECT

MEASUREMENT	Cross Section		
	ONE	TWO	THREE
WIDTH (m)	___ ___ . ___	___ ___ . ___	___ ___ . ___
DEPTH 1 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 2 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 3 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 4 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 5 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
FLOAT DISTANCE (m)	___ ___	___ ___	___ ___
FLOAT TIME (S)	___ ___ ___	___ ___ ___	___ ___ ___

FLAG	COMMENTS

Reviewed by (initial): _____

Flag Codes: K = no measurement or observation made; U = suspect measurement or observation; Q = unacceptable QC check associated with measurement; F1, F2, etc. = miscellaneous flags assigned by each field crew. Explain all flags in comments section.

Reviewed by (initial): _____

FIELD MEASUREMENT FORM - STREAMS (continued)

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

STREAM DISCHARGE

G VELOCITY AREA

	DIST. FROM BANK (CM)	VELOCITY (M/S) XX.X	DEPTH (CM) XX.X	FLAG
1	___ ___ ___	___ . ___ ___	___ ___ ___	
2	___ ___ ___	___ . ___ ___	___ ___ ___	
3	___ ___ ___	___ . ___ ___	___ ___ ___	
4	___ ___ ___	___ . ___ ___	___ ___ ___	
5	___ ___ ___	___ . ___ ___	___ ___ ___	
6	___ ___ ___	___ . ___ ___	___ ___ ___	
7	___ ___ ___	___ . ___ ___	___ ___ ___	
8	___ ___ ___	___ . ___ ___	___ ___ ___	
9	___ ___ ___	___ . ___ ___	___ ___ ___	
10	___ ___ ___	___ . ___ ___	___ ___ ___	
11	___ ___ ___	___ . ___ ___	___ ___ ___	
12	___ ___ ___	___ . ___ ___	___ ___ ___	
13	___ ___ ___	___ . ___ ___	___ ___ ___	
14	___ ___ ___	___ . ___ ___	___ ___ ___	
15	___ ___ ___	___ . ___ ___	___ ___ ___	
16	___ ___ ___	___ . ___ ___	___ ___ ___	
17	___ ___ ___	___ . ___ ___	___ ___ ___	
18	___ ___ ___	___ . ___ ___	___ ___ ___	
19	___ ___ ___	___ . ___ ___	___ ___ ___	
20	___ ___ ___	___ . ___ ___	___ ___ ___	

G TIMED FILLING

REPEAT	VOL. (L) XX.X	TIME (S)	FLAG
1	___ ___ . ___		
2	___ ___ . ___		
3	___ ___ . ___		
4	___ ___ . ___		
5	___ ___ . ___		

G NEUTRALLY BUOYANT OBJECT

MEASUREMENT	Cross Section		
	ONE	TWO	THREE
WIDTH (m)	___ ___ . ___	___ ___ . ___	___ ___ . ___
DEPTH 1 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 2 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 3 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 4 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
DEPTH 5 (cm)	___ ___ ___	___ ___ ___	___ ___ ___
FLOAT DISTANCE (m)	___ ___	___ ___	___ ___
FLOAT TIME (s)	___ ___ ___	___ ___ ___	___ ___ ___

FLAG	COMMENTS

Flag Codes: K = no measurement or observation made; U = suspect measurement or observation; Q = unacceptable QC check associated with measurement; F1, F2, etc. = miscellaneous flags assigned by each field crew. Explain all flags in comments section.

Reviewed by (initial): ____

PHab: CHANNEL/RIPARIAN CROSS-SECTION & THALWEG PROFILE FORM - STREAMS

SITE NAME: **SITE ID:** ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **DATE:** / / **VISIT:** G1 G2 ___

TEAM ID(X): G1 G2 G3 G4 G5 G6 G7 G8 **TRANSECT(X):** GA GB GC GD GE GF GG GH GI GJ GK

I. SUBSTRATE CROSS-SECTIONAL INFORMATION

Loc.	Dist LB XX.XX m	Depth XXX cm	Size Class Code	Embed. 0-100%	Flag
Lft	__ __ . __ __	__ __ __	__ __	__ __ __	
LCtr	__ __ . __ __	__ __ __	__ __	__ __ __	
Ctr	__ __ . __ __	__ __ __	__ __	__ __ __	
RCtr	__ __ . __ __	__ __ __	__ __	__ __ __	
Rgt	__ __ . __ __	__ __ __	__ __	__ __ __	

SUBSTRATE SIZE CLASS CODES

II. BANK MEASUREMENTS

Location	Bank Angle 0-360°	Undercut Dist. (m) X.XX	Flag
Left	__ __ __ °	__ . __ __	
Right	__ __ __ °	__ . __ __	
Wetted Width		__ __ . __ m	
Bar Width		__ __ . __ m	
Bankfull Width		__ __ . __ m	
Bankfull Height		__ __ . __ m	
Incised Height		__ __ . __ m	

III. FISH COVER/OTHER

COVER IN-CHANNEL
0 = Absent (0%)
1 = Sparse (< 10%)
2 = Moderate (10 - 40%)
3 = Heavy (40 - 75%)
4 = Very Heavy (> 75%)
(X one)

	0	1	2	3	4	Flag
Filamentous Algae						
Macrophytes						
Woody Debris > 0.3 m (Big)						
Brush/Woody Debris < 0.3 m (Small)						
Overhanging Veg. # 1 m of surface						
Undercut Banks						
Boulders						
Artificial Structures						

IV. CANOPY COVER MEASUREMENTS

Densiometer (0 to 17 max)

		Flag			Flag
CenUp	__ __		CenR	__ __	
CenL	__ __		Lft	__ __	
CenDwn	__ __		Rgt	__ __	

Flag Codes: **K** = no measurement made; **U** = suspect measurement; **F1**, **F2**, ect. = misc. flags assigned by each field crew. Explain all flags in comments section

V. VISUAL RIPARIAN ESTIMATES

	Left Bank					Right Bank					Flag
Riparian Vegetation Cover	0 = Absent (0%); 1 = Spare (< 10%); 2 = Moderate (10 - 40%); 3 = Heavy (40 - 75%); 4 = Very Heavy (> 75%)					D = Deciduous; C = Coniferous; E = Broadleaf Evergreen; M = Mixed; N = None					
CANOPY (> 5 m high)	D	C	E	M	N	D	C	E	M	N	Flag
Vegetation Type (D, C, M, or N)											
	0	1	2	3	4	0	1	2	3	4	Flag
Big Trees (Trunk > 0.3 m DBH)											
Small Trees (Trunk < 0.3 m DBH)											
UNDERSTORY (0.5 to 5 m high)	D	C	E	M	N	D	C	E	M	N	Flag
Vegetation Type (D, C, M, or N)											
	0	1	2	3	4	0	1	2	3	4	Flag
Woody Shrubs & Saplings											
Non-woody Herbs, Grasses, & Forbs											
GROUND COVER (< 0.5 m high)	0	1	2	3	4	0	1	2	3	4	Flag
Woody Shrubs & Seedlings											
Non-woody Herbs, Grasses, & Forbs											
Barren, Bare dirt or duff											
HUMAN INFLUENCE	0 = Not present, C = Within 10 m, P = > 10 m, B = On bank										Flag
	O	P	C	B		O	P	C	B		
Wall/Dike/Revetment/Riprap/Dam											
Buildings											
Pavement											
Road/Railroad											
Pipes (inlet/outlet)											
Landfill/Trash											
Park/Lawn											
Row Crops											
Pasture/Range/Hay field											
Logging Operations											
Mining Activity											

Reviewed by (initial): ____

PHab: THALWEG PROFILE & WOODY DEBRIS FORM - STREAMS

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: M A I A 9 7 - __ ___ _____ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

TRANSECT(X): GA-B GB-C GC-D GD-E GE-F GF-G GG-H GH-I GI-J GJ-K

THALWEG PROFILE

Increment (m) 6

STATION	THALWEG DEPTH (cm) (XXX)	WETTED WIDTH (m) (XX.X)	BAR WIDTH [1]		SOFT/SMALL SEDIMENT (X FOR YES)	CHANNEL UNIT CODE	POOL FORM CODE	SIDE CHANNEL (X FOR YES)	FLAG	COMMENTS
			X	(XX.X)						
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

LARGE WOODY DEBRIS ($ 10 cm SMALL END DIAMETER.; $ 1.5 m LENGTH)

- TALLY EACH PIECE -

DIAMETER LARGE END	PIECES ALL/PART IN BANKFULL CHANNEL			PIECES BRIDGE ABOVE BANKFULL CHANNEL		
	LENGTH 1.5 - 5 m	5 - 15 m	> 15 m	LENGTH 1.5 - 5 m	5 - 15 m	> 15 m
0.1 to <0.3 m						
0.3 - 0.6 m						
0.6 - 0.8 m						
> 0.8 m						

CHANNEL UNIT CODES	
PP	Pool, Plunge
PT	Pool, Trench
PL	Pool, Lateral Scour
PB	Pool, Backwater
PD	Pool, Impoundment
GL	Glide
RI	Riffle
RA	Rapid
CA	Cascade
FA	Falls
DR	Dry Channel

POOL FORM CODES	
N	Not a pool
W	Large Woody Debris
R	Rootwad
B	Boulder or bedrock
F	Unknown, fluvial
O	Other (note in comments)

FLAG	COMMENTS

Flag Codes: **K** = no measurement made; **U** = suspect measurement; **F1**, **F2**, etc. = misc. flags assigned by each field crew. Explain all flags in comments. 1 = Measure Bar Width at Station 0 and Mid-Station (5 or 7), X small column if bar present at the rest of the stations.

Reviewed by (initial): _____

PHab: SLOPE AND BEARING FORM - STREAMS

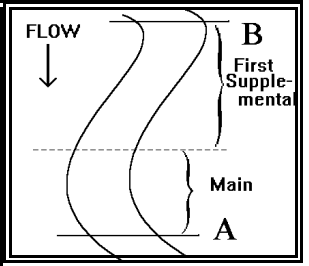
NOTE: ON BACK SIDE OF THIS FORM IS THE TORRENT EVIDENCE ASSESSMENT FORM !

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

TRANSECT	MAIN			FIRST SUPPLEMENTAL			SECOND SUPPLEMENTAL			FLAG
	SLOPE	BEARING 0 - 360	PROPOR-TION	SLOPE	BEARING 0 - 360	PROPOR-TION	SLOPE	BEARING 0 - 360	PROPOR-TION	
A 7 B	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
B 7 C	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
C 7 D	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
D 7 E	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
E 7 F	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
F 7 G	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
G 7 H	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
H 7 I	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
I 7 J	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		
J 7 K	___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		___ ___ . ___ %	___ ___ ___ °		

FLAG	COMMENTS



Reviewed by (initial):__________

VERTEBRATE COLLECTION FORM - STREAMS/RIVERS

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

ID BY (NAME): TRANSECT(X): GA-B GB-C GC-D GD-E GE-F GF-G GG-H GH-I GI-J GJ-K G ALL (stream)

TOTAL SHOCK (button) TIME ___ ___ ___ ___ seconds | TOTAL FISHING TIME ___ ___ ___ minutes | SHOCK DISTANCE (M) ___ ___ ___

SAMPLE ID (BARCODE)6 ___ ___ ___ ___ ___ ___ G NOT FISHED G NONE COLLECTED

SPECIMENS

TAG NO.	SPECIES CODE	COMMON NAME	TOTAL NUMBER		VOUCHERED COUNT	LENGTH (mm)		ANOMALIES		NUMBER OF MORTALITIES	FLAG
			TALLY	COUNT		MIN.	MAX.	CODE	COUNT		
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				

Flag Codes: F1, F2, etc. = Misc. flags assigned by field crew. Explain all flags in Comments section. LENGTH - enter single fish as minimum.

VERTEBRATE COLLECTION FORM - STREAMS/RIVERS (continued)

Page ____ of ____

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ DATE: / / VISIT: G1 G2 ___

Sample ID (Barcode) 6 ___ ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

ID BY (NAME): TRANSECT(X): GA-B GB-C GC-D GD-E GE-F GF-G GG-H GH-I GI-J GJ-K G ALL (stream)

SPECIMENS (continued)

TAG NO.	SPECIES CODE	COMMON NAME	TOTAL NUMBER		VOUCHERED COUNT	LENGTH (mm)		ANOMALIES		NUMBER OF MORTALITIES	FLAG
			TALLY	COUNT		MIN.	MAX.	CODE	COUNT		
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
___ ___	___ ___ ___ ___ ___ ___					___ ___ ___	___ ___ ___				
						___ ___ ___	___ ___ ___				

FLAG	COMMENTS

Reviewed by (initial):__________

VERTEBRATE LENGTH RECORDING FORM - STREAMS/RIVERS

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ____

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

MEASURED BY (NAME):

Species Code	Common Name	Length (mm) of Individual Fish														
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																
___ ___ ___ ___ ___ ___																

Reviewed by (initial): _____

RAPID HABITAT ASSESSMENT FORM: RIFFLE/RUN PREVALENCE - STREAMS

SITE NAME: DATE: / / 97 VISIT: G1 G2 ___

SITE ID: M A I A 9 7 - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

TOTAL SCORE		CATEGORY			
HABITAT PARAMETER		OPTIMAL	SUB-OPTIMAL	MARGINAL	POOR
1. INSTREAM COVER (FISH)		Greater than 50% mix of boulder, cobble, submerged logs, undercut banks, or other stable habitat.	30 to 50% mix of boulder, cobble, or other stable habitat; adequate habitat.	10 to 30% mix of boulder, cobble, or other stable habitat; habitat availability is less than desirable.	Less than 10% of boulder, cobble, or other stable habitat; lack of habitat is obvious.
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. EPIFAUNAL SUBSTRATE		Well-developed riffle and run; riffle is as wide as stream and its length extends two times the width of stream; abundance of cobble.	Riffle is as wide as stream, but is less than two times width; abundance of cobble; boulders and gravel common.	Run area may be lacking; reduced riffle area that does not extend across entire cross section and is less than two times the width; gravel or large boulders and bedrock prevalent; cobble present.	Riffles or run virtually non-existent; gravel or large boulders and bedrock prevalent; cobble lacking.
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. EMBEDDEDNESS		Gravel, cobble, and boulder particles are between 0 and 25% surrounded by fine sediment.	Gravel, cobble, and boulder particles are between 25 and 50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are between 50 and 75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are over 75% surrounded by fine sediment.
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. VELOCITY/DEPTH REGIMES		All four velocity regimes are present (slow-deep, slow-shallow, fast-deep, fast-shallow).	Only three of the four habitat types are present (if fast-shallow is missing, score lower than if other regimes are missing).	Only two of the four habitat types are present (if fast-shallow or slow-shallow are missing, score low).	Dominated by one velocity/depth regime (usually slow-deep).
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
5. CHANNEL ALTERATION		No channelization of dredging present..	Some channelization is present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging (greater than past 20 yr) may be present, but recent channelization is not present.	New embankments are present on both banks; and 40 to 80% of the stream reach is channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach is channelized and disrupted.
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
6. SEDIMENT DEPOSITION		Little or no enlargement of islands or point bars and less than 5% of the bottom is affected by sediment deposition.	Some new increase in bar formation, mostly from coarse gravel; 5 to 30% of the bottom is affected; slight deposition in pools.	Moderate deposition of new gravel or coarse sand on old and new bars; 30 to 50% of the bottom is affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material; increased bar development; more than 50% of the bottom is changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Reviewed by (initial): _____

RAPID HABITAT ASSESSMENT FORM: RIFFLE/RUN - STREAMS (continued)

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7 G8

HABITAT PARAMETER	CATEGORY			
	OPTIMAL	SUB-OPTIMAL	MARGINAL	POOR
7. FREQUENCY OF RIFFLES	Occurrence of riffles is relatively frequent; the distance between riffles divided by the width of the stream equals 5 to 7; variety of habitat.	Occurrence of riffles is infrequent; distance between riffles divided by the width of the stream equals 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is greater than 25.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. CHANNEL FLOW STATUS	Water reaches the base of both banks and a minimal area of channel substrate is exposed.	Water fills more than 75% of the available channel; or less than 25% of the channel substrate is exposed.	Water fill 25 to 75% of the available channel; and/or riffle substrates are mostly exposed.	Very little water in channel, and mostly present as standing pools.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
9. CONDITION OF BANKS	Banks stable; no evidence of erosion or bank failure.	Banks moderately stable; infrequent, small areas of erosion mostly healed over.	Moderately unstable; up to 60% of banks in reach have areas of erosion.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; on side slopes, 60 to 100% of bank has erosional scars.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
10. BANK VEGETATIVE PROTECTION	More than 90% of the stream bank surfaces are covered by vegetation.	70 to 90% of the stream bank surfaces are covered by vegetation.	50 to 70% of the stream bank surfaces are covered by vegetation.	Less than 50% of the stream bank surfaces are covered by vegetation.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
11. GRAZING OR OTHER DISRUPTIVE PRESSURE	Vegetative disruption, through grazing or mowing is minimal or not evident; almost all plants are allowed to grow naturally.	Disruption is evident but is not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	Disruption is obvious; patches of bare soil or closely cropped vegetation are common; less than one-half of the potential plant stubble height remaining.	Disruption of stream bank vegetation is very high; vegetation has been removed to 2 inches or less in average stubble height.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
12. RIPARIAN VEGETATION ZONE WIDTH (LEAST BUFFERED SIDE)	Width of riparian zone is greater than 18 m; human activities (i.e.; parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted this zone.	Zone width is between 12 and 18 m; human activities have only minimally impacted this zone.	Zone width is between 6 and 12 m; human activities have impacted the zone a great deal.	Width of zone is less than 6 m; little or no riparian vegetation due to man-induced activities.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Reviewed by (initial): _____

RAPID HABITAT ASSESSMENT FORM: GLIDE/POOL PREVALENCE - STREAMS

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7

TOTAL		CATEGORY			
HABITAT PARAMETER		OPTIMAL	SUB-OPTIMAL	MARGINAL	POOR
1. INSTREAM COVER		Greater than 50% mix of snags, submerged logs, undercut banks, or other stable habitat; rubble or gravel may be present.	30 to 50% mix of stable habitat; adequate habitat for maintenance of populations.	10 to 30% mix of stable habitat; habitat availability is less than desirable.	Less than 10% stable habitat; lack of habitat is obvious.
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. EPIFAUNAL SUBSTRATE		Preferred benthic substrate (to be sampled) is abundant throughout stream site and at a stage to allow for full colonization potential (i.e.; logs and snags that are not new fall and not transient.	Substrate is common but is not prevalent nor well-suited for full colonization potential.	Substrate frequently disturbed or removed.	Substrate is unstable or lacking.
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. POOL SUBSTRATE CHARACTERIZATION		Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation are common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation are present	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. POOL VARIABILITY		Even mix of large-shallow, large-deep, small-shallow, and small-deep pools are present.	The majority of pools are large and deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools are small-shallow or pools are absent.
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
5. CHANNEL ALTERATION		No channelization of dredging present.	Some channelization is present, usually in areas of bridge abutments; evidence of past channelization, i.e.; dredging (greater than past	New embankments are present on both banks; channelization may be extensive, usually in urban areas or drainage areas of	Extensive channelization; banks shored with gabion or cement; heavily urbanized areas; instream habitat greatly altered or removed
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
6. SEDIMENT DEPOSITION		Less than 20% of the bottom is affected; minor accumulation of fine and coarse material at snags and submerged	20 to 50% affected; moderate accumulation; substantial sediment movement only during major storm events; some new increase in bar	50 to 80% affected; major deposition; pools shallow and heavily silted; embankments may be present on both banks;	Channelized; mud, silt, and/or sand in braided or non-braided channels; pools almost absent due to deposition.
SCORE:		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Reviewed by (initial): _____

RAPID HABITAT ASSESSMENT FORM: GLIDE/POOL- STREAMS (continued)

SITE NAME: DATE: / / VISIT: G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ TEAM ID (X): G1 G2 G3 G4 G5 G6 G7

HABITAT PARAMETER	CATEGORY			
	OPTIMAL	SUB-OPTIMAL	MARGINAL	POOR
7. CHANNEL SINUOSITY	The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line.	The bends in the stream increase the stream length 2 to 3 times longer than if it was in a straight line.	The bends in the stream increase the stream length between 1 and 2 times longer than if it was in a straight line.	Channel is straight; waterway has been channelized for a long distance.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. CHANNEL FLOW STATUS	Water reaches the base of both lower banks and a minimal amount of channel substrate is exposed.	Water fills more than 75% of the available channel; or less than 25% of the channel substrate is exposed.	Water fills 25 to 75% of the available channel and/or riffle substrates are mostly exposed.	Very little water in channel, and mostly present as standing pools.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
9. CONDITION OF BANKS	Banks stable; no evidence of erosion or bank failure.	Banks moderately stable; infrequent, small areas of erosion mostly healed over.	Moderately unstable; up to 60% of banks in reach have areas of erosion.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; side slopes 60 to 100% of bank has erosional
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
10. BANK VEGETATIVE PROTECTION	Over 90% of the stream bank surfaces is covered by vegetation.	70 to 90% of the stream bank surfaces is covered by vegetation.	50 to 70% of the stream bank surfaces is covered by vegetation.	Less than 50% of the stream bank surfaces are covered by vegetation.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
11. GRAZING OR OTHER DISRUPTIVE PRESSURE	Vegetative disruption minimal or not evident; almost all plants are allowed to grow naturally.	Disruption is evident but is not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	Disruption is obvious; patches of bare soil or closely cropped vegetation are common; less than one-half of the potential plant stubble height remaining.	Disruption of stream bank vegetation is very high; vegetation has been removed to 2 inches or less in average stubble height.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
12. RIPARIAN VEGETATIOUN ZONE WIDTH (LEAST BUFFERED SIDE)	Width of riparian zone is greater than 18 meters; human activities (i.e.; parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted this zone.	Width of riparian zone is between 12 and 18 meters; human activities have only minimally impacted this zone.	Width of riparian zone is between 6 and 12 meters; human activities have impacted the zone a great deal.	Width of riparian zone is less than 6 meters; little or no riparian vegetation due to human activities.
SCORE:	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Reviewed by (initial): _____

ASSESSMENT FORM - STREAMS/RIVERS

SITE NAME: **DATE: / / VISIT: G1 G2 ___**

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8

WATERSHED ACTIVITIES AND DISTURBANCES OBSERVED (INTENSITY: BLANK=NOT OBSERVED, L=LOW, M=MODERATE, H=HEAVY)

RESIDENTIAL				RECREATIONAL				AGRICULTURAL				INDUSTRIAL				STREAM MANAGEMENT			
L	M	H		L	M	H		L	M	H		L	M	H		L	M	H	
			RESIDENCES				PARKS, CAMPGROUNDS				CROPLAND				INDUSTRIAL				LIMING
			MAINTAINED LAWNS				PRIMITIVE PARKS, CAMPING				PASTURE				MINES/QUARRIES				DRINKING WATER TREATMENT
			CONSTRUCTION				TRASH/LITTER				LIVESTOCK USE				OIL/GAS WELLS				ANGLING PRESSURE
			PIPES, DRAINS				SURFACE FILMS, SCUMS, OR SLICKS				ORCHARDS				POWER PLANTS				DREDGING
			DUMPING								POULTRY				LOGGING				CHANNELIZATION
			ROADS								IRRIGATION PUMPS				EVIDENCE OF FIRE				WATER LEVEL FLUCTUATIONS
			BRIDGE/CULVERTS												ODORS				FISH STOCKING
															COMMERCIAL				DAMS

REACH CHARACTERISTICS (percent of reach)

FOREST	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
SHRUB	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
GRASS	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
WETLAND	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
BARE GROUND	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
MACROPHYTES	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
AGRICULTURE - ROW CROP	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
AGRICULTURE - GRAZING	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
LOGGING	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
DEVELOPMENT (RESIDENTIAL & URBAN)	G RARE (< 5%)	G SPARSE (5 TO 25%)	G MODERATE (25 TO 75%)	G EXTENSIVE (> 75%)
WATER CLARITY	G CLEAR	G MURKY	G HIGHLY TURBID	G STORM INFLUENCED

WATERBODY CHARACTER (X ONE)

PRISTINE	G 5	G 4	G 3	G 2	G 1	HIGHLY
APPEALING	G 5	G 4	G 3	G 2	G 1	UNAPPEALING

GENERAL ASSESSMENT (wildlife, vegetation diversity, forest age class (0-25 yrs, 25-75 yrs, >75)

LOCAL ANECDOTAL INFORMATION:

Reviewed by (initial): _____

ASSESSMENT FORM - STREAMS/RIVERS (continued)

SITE NAME: **DATE:** / / **VISIT:** G1 G2 ___

SITE ID: ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ ___ **TEAM ID (X):** G1 G2 G3 G4 G5 G6 G7 G8