TRANSECT CHANNEL CHARACTERIZATION>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Reviewers Initials	
AN-Code	Date	

Transect	☐ A	☐ B	☐ C	☐ D	☐ E	☐ F	☐ G	☐ H	☐ I	☐ J	☐ K

Remember that transect A is upstream end of reach, 6 transects needed for 500 M and 11 transects for 1000 M (6 full thalweg profiles either way)	Transect Distance		Circle One	Complete	Partial

Channel Measurements

Bank/Wetted Width Measurements

Estimate any of these values that are not physically attainable. Use laser rangefinder and/or tape. "BPJ"	*F*	Distance (m)	
			Bankfull Height
			Bankfull Width
			Wetted Width

Bank Angle (estimate)

Circle One	Angle
V	Near Verticle/ Undercut (> 75°)
S	Steep (30 - 75°)
G	Gradual (5 - 30°)
F	Flat (< 30°)

Longitudinal Thalweg Measurements

Take 10 measurement between current transect and next transect downstream. Space the measurements as evenly as possible along thalweg. Calculate average thalweg and record in box below

Measurement	Depth (m)	Notes
0-At Transect		
1		
2		
3		
4		
5		
6		
7		
8		
9		
Average		

Notes:

Estimate the percentage of each habitat across the current transect. (from one bank to the other)

% Riffle		% Run		% Pool	

Substrate Particles	Particle Codes	Size Class
Bedrock	BR	Smooth surface rock/hardpan (>4000 mm –bigger than a car)
Boulder	BL	Basketball to car (>250-4000 mm)
Cobble	CB	Tennis ball to basketball (>64-250 mm)
Coarse Gravel	CG	Marble to tennis ball (>16-64 mm)
Fine Gravel	FG	Ladybug to marble (>2-16 mm)
Sand	SA	Gritty – up to ladybug (>0.06-2 mm)
Silt & Fines	ST	Fine – not gritty (<0.06 mm)
Clay	CL	Slick/ hard clay or hard-pan clay
Metal Hydroxide	MH	Any Metal Hydroxide Deposits (Use only in the Substrate Layer Profile)

Substrate Characterization and Depth Profile (Perpendicular from bank out into channel)

LDB							RDB						
Spot (m)	Depth (m)	Habitat Type	Dom Sub 1	%age 1	Dom Sub 2	%age 2	Spot (m)	Depth (m)	Habitat Type	Dom Sub 1	%age 1	Dom Sub 2	%age 2
0							0						
2							2						
4							4						
6							6						
8							8						
10							10						

Habitat Type: Rf=Riffle, Rn= Run, Pl=Pool

Reviewers Initials		TRANSECT HABITAT & RIPARIAN CHARACTERIZATION>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Transect	☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K	

In-Channel Fish Cover / Structure in Riparian Plot

Directions: Observe all structure that is found inside the wetted section of the riparian plot (20m x 10M) only. Do not record any structure found outside the plot. This is recorded elsewhere.

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

Cover Type	LDB	RDB
Filamentous Algae	0 1 2 3 4	0 1 2 3 4
Aquatic and Inundated Herb. Vegetation (Macrophytes)	0 1 2 3 4	0 1 2 3 4
Large Woody Debris (diameter >0.3 m or >1ft and 15ft in length)	0 1 2 3 4	0 1 2 3 4
Small Woody Debris (<0.3m or ~1 ft. diameter-alive or dead)	0 1 2 3 4	0 1 2 3 4
Inundated Live Trees/Roots (>0.3m or ~1 ft. diameter)	0 1 2 3 4	0 1 2 3 4
Overhanging Vegetation (< 1.0 m from surface)	0 1 2 3 4	0 1 2 3 4
Undercut Banks, Ledges, or Sharp Dropoffs	0 1 2 3 4	0 1 2 3 4
Boulders	0 1 2 3 4	0 1 2 3 4
Artificial Structures (Docks, Landings, etc.)	0 1 2 3 4	0 1 2 3 4

Fish Cover Notes:

Immediate Visual Riparian Vegetation Estimates

Canopy / Vegetative Types: D=Deciduous C=Coniferous MD=Mixed Deciduous MC=Mixed Coniferous N=None
Density Codes: 0=Absent (0%) 1=Sparse (<10%) 2=Moderate (10-40%) 3=Heavy (>40-75%) 4=Very Heavy (<75%)
DBH = Diameter Breast Height

Canopy (> 5 m high)	LDB					RDB				
Vegetation Type	D	C	MD	MC	N	D	C	MD	MC	N
Big Trees (Trunk > 0.3 m DBH)	0	1	2	3	4	0	1	2	3	4
Small Trees (<0.3 m DBH)	0	1	2	3	4	0	1	2	3	4
Understory (0.5 to 5 m high)										
Vegetation Type	D	C	MD	MC	N	D	C	MD	MC	N
Woody Shrubs/Saplings	0	1	2	3	4	0	1	2	3	4
Grasses/Herbacious	0	1	2	3	4	0	1	2	3	4
Ground Cover (<0.5 m high)										
Woody Shrubs	0	1	2	3	4	0	1	2	3	4
Ferns, Grasses, Mosses	0	1	2	3	4	0	1	2	3	4
Leaf Litter	0	1	2	3	4	0	1	2	3	4
Barren Soil	0	1	2	3	4	0	1	2	3	4

Riparian Notes:

Invasive Species in transect riparian plot? ☐ Japanese Knotweed ☐ Tree-of-Heaven ☐ Multi-flora Rose ☐ Crown Vetch ☐ Kudzu ☐ Bamboo ☐ Autumn Olive ☐ Japanese Honeysuckle ☐ Purple Loosestrife ☐ Wineberry ☐ Other:

Immediate Riparian Human Influence

Location Rating: 0 = Not present, P= > 10m, C = Within Plot, , B = On Bank

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

Only perform assessment on previously determined bank unless this transect is scheduled to be one of the six complete transects; then both banks should be assessed

	LDB								RDB							
	Location				Density				Location				Density			
Bank Stabilization	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Buildings	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Roads	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Railroad	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Parking Structures	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
ATV Trails	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Foot Trails	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Pipes (Inlet/Outlet)	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Landfill/Trash	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Lawn/Park	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Golf Course	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Row Crops	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Pasture/Ag.	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Logging	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Gas (well or pipes)	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4
Mining	0	P	C	B	1	2	3	4	0	P	C	B	1	2	3	4