RappFLOW Riparian Buffer Evaluation Data Sheet Bank (check one): Left____ Right____ Complete both pages for each bank (left or right) for each stream reach (evaluation area). Characterize the entire reach. Use a separate page for the other bank. Please refer to handbook for explanations and clarifications of questions.

Section 1: Background Information

- 1. Date of this assessment:
- 2. Name of person(s) doing assessment: _____
- 2. Name of person(s) doing assessment: _______
 3. GPS Unit Number used for taking these waypoints? _______
- 4. Reach location description:
- 5. Length of reach: ______ ft
- 6. Upstream GPS Waypoint #: _____ Downstream GPS Waypoint #: _____
- 7. As you complete the data sheets, take GPS points and photographs of any interesting or unusual features. Use the space below to identify the feature.

GPS Point	<u>Photo #</u>	Feature Description
1		
2		
3		
4		
5		
6		
7		
8.		

8. Comments/ observations about reach: _____

9. Please take a photo or make a sketch of the reach (while facing downstream)

Section 2: Stream Characteristics (not all questions are given points)

1. Average Stream width (at bankfull):	ft						
2. Average Bank Height (circle one only for the bank you are describing):							
a) 0-2 ft b) >2-5 ft	c) >5-8 ft	d) >8 ft					
3. Bank slope (circle one):							
a) Undercut or greater than 90°	b) Vertical /90) ^o					
c) Greater than or equal to 45° d)	Less than 45°						
4. Predominant bank cover (circle one onl	y for the ban	k you are describing):	4. +			
a) Greater than 90% vegetated (add	25 pts) b) 70	-89% vegetated (add	15 pts)				
c) 50-69% vegetated (add 10 pts)	d) 0-4	49% vegetated (add 0	pts)				
5. Is there rock rip-rap, concrete, metal, o	r other stabil	izing structures on t	he bank?	5.+			
a) No (add 15 pts) b) Less the by the	han 20% (add	5 pts) c) Greate	er than 20% (add 0	pts)			
6. Is there evidence of erosion? (Circle one	a) No	bank erosion (add 15	5 pts)	6.+			
b) Minor undercutting (add 10 pts)	c) Ma	anmade or livestock d	isturbance (add 5 p	ts)			
d) Major undercutting (add 2 pts)	e) Ba	ink collapse/slumping	(add 0 pts)				
7. Is there new deposition of sediments/sam	d bars? (Cir	cle one) Yes	No				
8. Are trees hanging over the stream? (Kee	eps the water c	cooler). (Circle one)		8.+			
a) 11 or more (add 20 pts)	b) 1-10 trees (add 15 pts)	c) None (add 0 pt	s)			
9. Are trees or large branches in the stream				9. +			
a) 4-6 (add 15 pts)							
c) 7 or more (add 0 pts)	d) None or if s	some are acting as del	oris plugs (add 0 pts	3)			
10. Are there any ditches, tributaries, pipes, or swales entering the stream? (circle all that apply)							
11. Overall bank stability: Rank on scale of	1(least stable) to 10 (most stable)		11.+			

RappFLOW Riparian Buffer Evaluation Data She	et Bank (check one): Left_	Right
Section 3: Zone 1 - the area 0-15 ft from the stre	eam	
1. What is the most common land cover in Zone 1 ? (Circle	e one)	1. +
a)Trees (add 20 pts) b) Shrubs (add 1		ow (add 5 pts)
d) Thick grass/ hayland (add 3 pts) e) Ag. Crops or	pasture (add 2 pts) f) Gravel (1 pt)	
g) Exposed soil (add 0 pts) h) impervious surface (a	add 0 pts) i) lawn (add 0 pts) j) other	
2. Are trees present in Zone 1?		2. +
a) Densely vegetated with trees (add 10 pts)		
c) Sparsely vegetated (add 3 pts)	d) No trees (add 0 pts)	2
3. If you answered choice (a) or (b) to question 2, how higha) The buffer tree height is as tall as the stream is y	is the average height of the trees?	3. +
b) The buffer tree height is ¹ / ₂ the stream width (ad		
4.Is the buffer located on the east or south side of the stream		
a) Densely vegetated w/ trees (add 5 pts)	b) Moderately vegetated w/trees (add	3 nts)
c) Sparely vegetated w/ trees (add 5 pts)	b) Moderatery vegetated writees (add	4. +
5. Are shrubs present in Zone 1?		5. +
a) Densely vegetated with shrubs (add 10 pts)	b) moderately vegetated (add 5 pts)	
c) Sparsely vegetated (add 3 pts)	d) No shrubs (add 0 pts)	
6. Do grass and small plants (not including lawn) cover th		6. +
a) Full cover (98% or better) (add 5 pts)	b) Partial cover (50-97%) (add 2 pts)	
c) Spotty cover (add 1 pt)	d) No grass (add 0 pts)	
7. Is there evidence of stream bank tree throw? (falling tree		7.+
a) No or 1 tree throw (add 5 pts)	b) more than 1 (add 0 pts)	8. +
8. Is there impervious surface in Zone 1?		8. +
a) No (add 20 pts) b) 1-10% (add 7 pts)	c) 11-25% (add 5 pts)	
d) 26-50% (add 2 pts) e) 51-75% (add 1 pt)		0
9. Are there signs of a recent timber harvest in Zone 1?		9. +
	ctive harvest leaving $> 20\%$ (add 5 pts)	
c) High grading (add 2 pts) d) Clear 10. Is there active land conversion away from forested but	r cut (add 0 pts) ffor? No (add 10 pts), Yos (add 0 pts)	10 1
TOTAL OF ZONE 1		/ 100
Section 4: Zone 2 - the area 15-100 ft from the st	troom	
1. What is the most common land cover in Zone 2? (Circle		1. +
a)Trees (add 20 pts) b) Shrubs (add 1		$\frac{1}{1}$ ow (add 5 pts)
d) Thick grass/ hayland (add 3 pts) e) Ag. Crops or	pasture (add 2 pts) f) Gravel (1 pt)	ow (add 5 pts)
g) Exposed soil (add 0 pts) h) impervious surface (a		
2. What is the second most common land cover in Zone 23		2. +
(Must be greater than 10% of land cover to qualify. If no sec		
a)Trees (add 10 pts) b) Shrubs (add 7		ow (add 5 pts)
d) Thick grass/ hayland (add 3 pts) e) Ag. Crops or	pasture (add 2 pts) f) Gravel (add 1pt)	
g)Exposed soil (add 0 pt) g) impervious surface (ad	d 0 pts) h) lawn (add 0 pts) i) other
3. What is the predominate slope of Zone 2?		3. +
a) Mostly flat (add 5 pts) b) Medium grade (add 3 p	pts) c) Very steep (add 0 pts)	
4. Is there impervious surface in Zone 2?		4. +
a) 0-3% (add 10 pts) b) 4-10% (add 7 pts)	, i ,	
d) 26-50% (add 2 pts) e) 51-75% (add 1 pt)	f) 76-100% (add 0 pts)	- .
5. Are there signs of a recent timber harvest in Zone 2?	200((add 2 sta)	5. +
	vest leaving $> 20\%$ (add 3 pts)	
c) High grading (add 1 pt) d) Clear cut (add 6. Is there active land conversion away from forested buff		6. +
0. Is there active fand conversion away from forested built	er: No (add 5 pts) Tes (add 6 pts)	0. +
TOTAL OF ZONE 2		/50
Section 5: Additional Points		
1. Are there restoration efforts in place in either zone? Ye	es (add 10 pts) No (add 0 pts)	1. +
2. Is total of zone 1 is equal to or greater than 85 <i>and</i> the		
and the buffer is continuous over 2 or more stream segme		
up stream? Yes (add 10 pts) No (add 0 pts)		
TOTAL (not including stream characteristics)	••••••	