APPENDIX T

WOODY RIPARIAN HABITAT CLASSIFICATION

Form Class	NORM	>78%		3
		64-78%		2
		50-63%		1
		<50%		0
	HEDGED	<14%		3
		14-28%		2
		29-50%		1
		>50%		0
	DEADDED & NT	<2%		3
		2-16%		2
		17-24%		1
		25-30%		0
		>30%		U
Coverage Class	CANOPY	>76%		9
		59-76%		6
		30-58%		3
		20-29%		1
		<20%		0
Size Class	REPROD.	1-10MM	11-15MM	>15MM
		>21%	>21%	<58% 3
		4-21%	9-21%	58-87% 2
		1-4%	4-9%	87-96% 1
		<1%	<4%	>96% 0
Streambank Erosion	EROSION	<4%		3
		4-15%		2
		16-30%		1
		31-39%		0
		≥40%		U

Instructions:
Rate each parameter as shown and add the cumulative score. In a few cases age classes will fall into different score brackets; score reproduction in the bracket in which two of the three categories fall. Any reach with more than 30% dead and decadent or 40% or more bank erosion routinely rates unsatisfactory (u) irrespective of total score. The total score is a good indicator to determine if the "problem" is on-site or off-site in origin.

Excellent =	19-24 points
Good =	10-18 points
Fair =	7-9 points
Poor =	<7 points

APPENDIX U

STREAM HABITAT CLASSIFICATION

Stream Survey Form

Stream:
Gradient:
Location:
Time:
Date:

Riffle & Runs:
Stream depth: 1/4: 1/2: 3/4:
Average stream width:

Pools: Width: Depth: Amt: & Type of Pool Cover:

Pool - riffle ratio:

Streambanks: Left: Right:
Bank cover type:
Hgt. of vegetation:
% Bank Cover:
% Ungulate use:
Bank stability:

Classification of Stream bottom & % of each type:
Fine gravel .1-1 in.
Coarse gravel 1-3 in.
Small rubble 3-6 in.
Large rubble 6-12 in.

Aquatic vegetation:
Percent of bottom with algae & diatoms:
Percent of bottom with rooted vegetation:

Amt. of Fish Cover:
% of Streambanks with overhanging vegetation:
% of Banks with undercut areas:
% of Stream shaded:

Sedimentation:
Percent of channel with silt cover:
depth of silt cover:

Chemical & Physical Measurements:
Time:
D. O.:
Current Velocity: 1/4: 1/2: 3/4:
Water Temp.:
Air Temp.:
PH:

Other Apparent Limiting Factors to Fisheries in Area:

STREAM HABITAT INVENTORY

	EXCELLENT	GOOD	FAIR	POOR
1) High Stream bank cover % shading	4 more than 80% shading	3 60% to 80% shading	2 40% to 60% shading	1 less than 40% shading
2) Low Stream bank cover	4 veg. well rooted & over 8", sod intact - no erosion from sodded areas.	3 veg. mostly over 4", sod mostly intact with less than 10% bare soil with broken sod, some surface erosion.	2 veg. mostly less than 3" high, less than 20% bare soil, sod broken & surface erosion apparent.	1 broken sod, over 20% bare soil showing, surface erosion a serious problem.
3) Stream bank stability	4 less than 5% of banks with active erosion.	3 5% to 10% of banks with active erosion.	2 10% to 20% of banks with active erosion.	1 more than 20% of banks with active erosion.
4) Stream channel stability	4 no or negligible lateral channel movement & bank erosion, channel scour or changing channels.	3 up to 5% lateral movement & bank erosion, minor channel scouring & changing channels within stream bed.	2 up to 10% lateral movement, scouring & redeposition obvious, channel changes occuring.	1 more than 10% lateral channel movement & bank cutting, channel changes & scouring evident & source of extreme sedimentation.
5) Sedimentation % fine sediments- sand & smaller covering stream bottom.	4 less than 10% fine sediments.	3 10% to 15% fine sediments.	2 15% to 25% fine sediments.	1 more than 25% fine sediments.
6) In-stream cover- pools, cutbanks, boulders, debris, overhanging veg., velocity breaks or turbulence	4 over 50% of stream channel containing instream cover.	3 25% to 50% instream cover, 50% to 75% exposed.	2 10% to 25% instream cover, 75% to 90% exposed.	1 less than 10% instream cover, over 90% exposed.
	Column Total _____	Column Total _____	Column Total _____	Column Total _____

Total Numerical Score _____

Overall Rating _____

Excellent = 22 to 24 Good = 16 to 21
Fair = 10 to 15 Poor = 6 to 9

APPENDIX V

LAND TRANSFERS - PROPOSED PLAN (ALTERNATIVE E)

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.1S., R.2W.				
Sec. 4, Lot 4, SW¼NW¼, E½SW¼, W½SE¼		232.94		
T.1N., R.2W.				
Sec. 13, SE¼SE¼		40.00		
13, NE¼SW¼, N½SE¼				120.00
T.1N., R.3W.				
Sec. 25, SW¼NW¼		40.00		
26, W½NE¼, SE¼NE¼, NE¼NW¼		160.00		
T.2N., R.3W.				
Sec. 21, W½SW¼NE¼, NW¼NW¼, S½NW¼, N½SW¼, SW¼SW¼, N½SE¼SW¼, W½W½SE¼	320.00			
28, NE¼SW¼, SW¼SE¼		80.00		
29, NE¼NW¼		40.00		
T.4N., R.2E.				
Sec. 7, NW¼NE¼, NE¼NW¼	80.00			
T.4N., R.1E.				
Sec. 11, SW¼NE¼		40.00		
T.5N., R.1E.				
Sec. 3, SW¼NW¼		40.00		
27, SW¼SW¼			40.00	
28, SE¼NW¼			40.00	
33, NW¼NE¼			40.00	
T.5N., R.1W.				
Sec. 14, NW¼SW¼, SE¼SE¼		80.00		
T.5N., R.2W.				
Sec. 21, NE¼NE¼, NE¼NW¼		80.00		
T.6N., R.5E.				
Sec. 23, Lot 7	0.12			
26, Lot 8	5.05			
T.6N., R.3E.				
Sec. 18, E½SW¼		80.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.6N., R.2E.				
Sec. 2, Lot 2		39.66		
17, SE¼NE¼		40.00		
21, NE¼NW¼		40.00		
31, Lot 1		38.61		
T.6N., R.1E.				
Sec. 18, SW¼NE¼		40.00		
21, SE¼SW¼, S½SE¼		120.00		
22, SW¼SW¼		40.00		
27, W½NW¼		80.00		
28, N½NE¼		80.00		
32, NW¼NE¼, N½NW¼		120.00		
T.6N., R.5W.				
Sec. 1, SE¼NE¼				40.00
2, SW¼NE¼, SE¼NW¼, W½SE¼				160.00
10, S½NE¼, NE¼SE¼, S½SE¼				200.00
10, NW¼SE¼		40.00		
12, SE¼NW¼				40.00
23, NW¼NW¼SW¼		10.00		
25, NW¼	160.00			
T.7N., R.2E.				
Sec. 22, SW¼NW¼		40.00		
35, SE¼NW¼, NE¼SE¼		80.00		
T.7N., R.1E.				
Sec. 1, Lot 3, SE¼NW¼, NW¼SW¼		120.00		
2, SE¼SE¼		40.00		
T.7N., R.1W.				
Sec. 12, SW¼NW¼		40.00		
T.7N., R.2W.				
Sec. 7, Lot 1		38.42		
8, NE¼NW¼		40.00		
17, NE¼NE¼		40.00		
T.7N., R.3W.				
Sec. 2, SW¼NE¼		40.00		
4, Lots 1, 2, 3, 4, S½N½, E½SE¼		398.90		
5, Lot 1, SE¼NE¼		80.08		
8, NE¼NE¼		40.00		
12, NW¼SE¼		40.00		
32, NW¼SE¼		40.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.7N., R.5W.				
Sec. 20, Lot 2a			2.80	
T.8N., R.1E.				
Sec. 23, NW¼NW¼		40.00		
28, NE¼NW¼		40.00		
T.8N., R.2W.				
Sec. 18, Lots 5, 6, E½SW¼		158.64		
19, NE¼, E½NW¼, NE¼SW¼, N½SE¼		360.00		
20, NW¼		160.00		
31, Lot 2, S½SE¼		119.13		
32, SW¼NE¼, N½SW¼		120.00		
T.8N., R.3W.				
Sec. 13, SW¼NE¼, SE¼SW¼		80.00		
23, W½NE¼, SE¼NE¼		120.00		
24, NE¼NW¼, S½NW¼, NE¼SW¼		160.00		
25, SW¼NW¼, NE¼SW¼		80.00		
28, NE¼NE¼		40.00		
31, NE¼SE¼		40.00		
32, N½SW¼, SE¼SW¼, SE¼		280.00		
33, NE¼NE¼, S½S½		200.00		
T.9N., R.2E.				
Sec. 18, Lot 2		21.98		
19, Lot 3		22.25		
T.9N., R.1E.				
Sec. 11, S½NW¼		80.00		
26, W½NE¼, SE¼NE¼		120.00		
T.9N., R.2W.				
Sec. 7, Lot 1, NE¼NW¼		74.16		
T.9N., R.3W.				
Sec. 18, SE¼SE¼		40.00		
23, NW¼SE¼		40.00		
28, N½NW¼		80.00		
T.10N., R.3W.				
Sec. 26, NW¼NW¼		40.00		
27, SW¼SE¼		40.00		
34, SE¼NE¼		40.00		
35, S½NW¼, NE¼SW¼		120.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.10N., R.4W.				
Sec. 10, SE¼SW¼		40.00		
12, SW¼SW¼		40.00		
T.12N., R.3W.				
Sec. 12, Lot 3, SE¼NW¼, NW¼SE¼		118.34		
13, NW¼NE¼		40.00		
T.12N., R.4W.				
Sec. 20, NW¼SE¼		40.00		
27, SE¼SE¼		40.00		
T.12N., R.5W.				
Sec. 31, E½SW¼		80.00		
35, NE¼NE¼, NE¼NW¼		80.00		
T.11N., R.2E.				
Sec. 19, Lot 7		40.23		
T.11N., R.1E.				
Sec. 23, NW¼NE¼		40.00		
24, SW¼NW¼		40.00		
26, SE¼SW¼		40.00		
T.11N., R.2W.				
Sec. 1, Lot 1, SE¼NE¼		80.18		
4, Lot 4		43.25		
15, SE¼NE¼, S½NW¼, N½SW¼		200.00		
23, W½NE¼		80.00		
25, SW¼NW¼		40.00		
T.11N., R.5W.				
Sec. 1, W½SE¼		80.00		
5, SE¼SE¼		40.00		
6, Lot 6		40.30		
8, NE¼NE¼		40.00		
9, N½NW¼		80.00		
T.11N., R.6W.				
Sec. 5, NW¼SW¼, SE¼SE¼		80.00		
8, NE¼NE¼, SE¼SE¼		80.00		
T.11N., R.7W.				
Sec. 11, NW¼SE¼		40.00		
12, SW¼SW¼		40.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.13N., R.1W.				
Sec. 17, SE¼SE¼		40.00		
20, NE¼NW¼		40.00		
T.13N., R.2W.				
Sec. 6, SE¼NW¼		40.00		
18, Lots 1, 2		66.87		
T.13N., R.3W.				
Sec. 13, SE¼NE¼		40.00		
22, SE¼NE¼		40.00		
T.13N., R.4W.				
Sec. 11, N½NE¼, SE¼NE¼		120.00		
12, NE¼NE¼, SW¼NW¼		80.00		
23, NE¼NE¼		40.00		
T.13N., R.7W.				
Sec. 25, SE¼NE¼		40.00		
T.14N., R.1W.				
Sec. 8, NW¼SE¼		40.00		
T.14N., R.2W.				
Sec. 1, SE¼SW¼, NW¼SE¼		80.00		
3, SW¼NW¼, NW¼SW¼		80.00		
4, Lots 1, 2, SE¼NE¼		119.29		
T.14N., R.3W.				
Sec. 1, Lot 1		40.00		
23, SW¼NE¼, N½NW¼, SE¼NW¼, E½SW¼, NW¼SE¼		280.00		
T.15N., R.4E.				
Sec. 3, NW¼SW¼		40.00		
T.15N., R.1W.				
Sec. 3, Lot 4		39.11		
4, Lot 4, SW¼NW¼		79.50		
9, S½NW¼		80.00		
17, NW¼NE¼		40.00		
18, NW¼SE¼		40.00		
23, NE¼NW¼, NE¼SW¼		80.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.15N., R.2W.				
Sec. 3, SW¼SW¼		40.00		
13, N½N½		160.00		
14, NW¼NE¼, N½NW¼		120.00		
15, NE¼NE¼		40.00		
27, W½NW¼		80.00		
30, Lots 3, 4, E½SW¼		162.30		
31, Lot 1		41.12		
33, SE¼SE¼		40.00		
35, NW¼SE¼		40.00		
T.15N., R.3W.				
Sec. 25, SE¼SE¼		40.00		
27, SW¼SE¼		40.00		
28, SE¼SE¼		40.00		
33, NE¼NE¼		40.00		
34, NE¼NE¼		40.00		
T.16N., R.1W.				
Sec. 4, NE¼SW¼		40.00		
25, NE¼SE¼		40.00		
33, S½S½		160.00		
T.16N., R.2W.				
Sec. 30, Lot 6		7.84		
T.16N., R.4W.				
Sec. 8, NE¼NW¼			40.00	
17, NW¼NW¼			40.00	
18, E½NE¼			80.00	
T.16N., R.5W.				
Sec. 2, Lot 3			40.14	
4, NE¼SW¼			40.00	
5, N½SW¼, SE¼SW¼			120.00	
6, Lots 1, 5, 6			101.24	
8, SE¼NE¼, E½NW¼			120.00	
9, NW¼NW¼, SE¼NW¼, SE¼SW¼, W½SE¼			200.00	
10, SW¼			160.00	
11, NE¼			160.00	
15, NW¼NE¼, NW¼NW¼, N½SW¼, SW¼SW¼			200.00	
19, Lots 3, 4, E½SW¼			142.15	
21, NW¼NE¼, N½NW¼			120.00	
23, SE¼NW¼, E½SW¼			120.00	
24, E½NW¼			80.00	

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.16N., R.6W.				
Sec,. 1, Lot 2, NW¼SE¼			64.20	
10, E½SE¼			80.00	
14, S½NE¼			80.00	
23, SE¼SW¼, SE¼			200.00	
24, SW¼, S½SE¼			240.00	
25, W½			320.00	
26, N½, N½S½			480.00	
27, NW¼NW¼, S½			360.00	
28, SE¼NE¼, NE¼SE¼			80.00	
T.17N., R.1W.				
Sec. 5, Lot 4, SW¼NW¼		73.45		
15, SE¼SW¼		40.00		
19, S½SE¼		80.00		
21, NW¼NE¼, NW¼NW¼		80.00		
22, SW¼NE¼		40.00		
T.17N., R.4W.				
Sec. 6, Lots 6, 7, E½SW¼			133.60	
7, Lots 1, 2, E½NW¼, NE¼SW¼			173.10	
18, Lots 1, 3, 4, SE¼NW¼, E½SW¼			200.50	
19, Lots 1, 5, E½NW¼, E½SW¼NW¼, NE¼SW¼, E½NW¼SW¼, N½SE¼SW¼			210.97	
T.17N., R.5W.				
Sec. 1, E½SW¼, E½SW¼SW¼, SE¼			260.00	
11, NE¼NE¼SE¼, S½NE¼SE¼, NE¼SW¼SE¼, S½SW¼SE¼, SE¼SE¼			100.00	
12, SW¼NE¼, S½NW¼, N½SW¼, W½SE¼			280.00	
13, SW¼NE¼, S½NW¼, N½SW¼, N½SE¼			280.00	
14, N½NE¼, SE¼NE¼, NE¼SE¼			160.00	
23, SE¼SW¼			40.00	
24, E½NE¼			80.00	
25, NW¼NE¼, SE¼NE¼, E½SE¼			160.00	
27, SW¼NE¼, NE¼SW¼			80.00	
28, E½NE¼SE¼SE¼, S½SE¼SE¼			25.00	
32, SW¼SW¼			40.00	
34, S½			320.00	
35, SE¼SE¼			40.00	
T.18N., R.2W.				
Sec. 33, SW¼NE¼		40.00		
TOTALS	563.00	10,106.55	6,374.00	560.00