



Stream Steward Annual Fall Habitat Assessment Data Entry Sheet

Date	Time
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Stream Steward #1 Name	Stream Steward #2 Name
Stream Name	Site #
Site Description	

Weather in Past 24 Hours

- Clear/Sunny
 Cloudy/Overcast
 Showers (intermittent)
 Rain (steady rain)
 Storm (heavy rain)
 Other _____

Weather Conditions Now

- Clear/Sunny
 Cloudy/Overcast
 Showers (intermittent)
 Rain (steady rain)
 Storm (heavy rain)
 Other _____

General Water Quality Characteristics

Water Temperature	°C	or	°F
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Appearance			Odor	
<input type="checkbox"/> Clear	<input type="checkbox"/> Turbid	<input type="checkbox"/> Orange	<input type="checkbox"/> None	<input type="checkbox"/> Chlorine
<input type="checkbox"/> Milky	<input type="checkbox"/> Dark Brown	<input type="checkbox"/> Greenish	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rotten Eggs
<input type="checkbox"/> Foamy	<input type="checkbox"/> Oily Sheen		<input type="checkbox"/> Fishy	
<input type="checkbox"/> Other (describe)			<input type="checkbox"/> Other	

Approximate Width of Stream Channel	feet	<input type="checkbox"/> Measured	<input type="checkbox"/> Estimated
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Local Land Use

Land uses in the local watershed can potentially have an impact on a stream. Check "1" if present or "2" if clearly having an impact on the stream.

1	2	Residential	1	2	Roads, etc.	1	2	Construction underway on:
<input type="checkbox"/>	<input type="checkbox"/>	Single-family housing	<input type="checkbox"/>	<input type="checkbox"/>	Paved roads or bridges	<input type="checkbox"/>	<input type="checkbox"/>	Housing development
<input type="checkbox"/>	<input type="checkbox"/>	Multi-family housing	<input type="checkbox"/>	<input type="checkbox"/>	Unpaved roads	<input type="checkbox"/>	<input type="checkbox"/>	Commercial development
<input type="checkbox"/>	<input type="checkbox"/>	Lawns				<input type="checkbox"/>	<input type="checkbox"/>	Road bridge construction/repair
<input type="checkbox"/>	<input type="checkbox"/>	Commercial/Institutional						

1	2	Agricultural	1	2	Recreation	1	2	Other
<input type="checkbox"/>	<input type="checkbox"/>	Grazing land	<input type="checkbox"/>	<input type="checkbox"/>	Power boating	<input type="checkbox"/>	<input type="checkbox"/>	Mining or gravel pits
<input type="checkbox"/>	<input type="checkbox"/>	Feedlots or animal holding areas	<input type="checkbox"/>	<input type="checkbox"/>	Golfing	<input type="checkbox"/>	<input type="checkbox"/>	Logging
<input type="checkbox"/>	<input type="checkbox"/>	Cropland	<input type="checkbox"/>	<input type="checkbox"/>	Camping	<input type="checkbox"/>	<input type="checkbox"/>	Industry
<input type="checkbox"/>	<input type="checkbox"/>	Inactive agricultural land/fields	<input type="checkbox"/>	<input type="checkbox"/>	Swimming/fishing/canoeing	<input type="checkbox"/>	<input type="checkbox"/>	Oil and gas drilling
			<input type="checkbox"/>	<input type="checkbox"/>	Hiking/paths	<input type="checkbox"/>	<input type="checkbox"/>	Trash dump
						<input type="checkbox"/>	<input type="checkbox"/>	Landfill



Stream Steward Annual Fall Habitat Assessment Data Entry Sheet (cont.)

Other Observations and Notes

Please Return the completed sheet to:
Stream Steward Program c/o King Conservation District
1107 SW Grady Way, Suite 130
Renton, WA 98057

Annual Fall Habitat Assessment

Muddy Bottom Sampling Field Data Sheet

Habitat Parameter	Category			
	Optimal	Suboptimal	Marginal	Poor
1. Shelter for Fish and Macro-invertebrates Snags, submerged logs, undercut banks, rubble or other stable habitat found over 50% of the site: logs/snags are old fall. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Pool Substrate Composition Pools have a mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. Pool Variability Even mix of large-shallow, large-deep, small-shallow, small-deep pools. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. Sediment Deposition Less than 20% of stream bottom affected by extensive sediment deposition; minor accumulation of fine and coarse material at snags and submerged vegetation; little or no enlargement of islands or point bars. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
5. Channel Sinuosity The bends in the stream would increase the stream length 3 to 4 times longer than if it was in a straight line. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
6. Channel Alteration Stream straightening, dredging, artificial embankments, dams or bridge abutments absent or minimal; stream with meandering pattern. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Channel flow status Water reaches base of both lower banks and minimal amount of channel substrate is exposed. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
_____	Subtotal from this page			

Muddy Bottom Sampling Field Data Sheet

Habitat Parameter	Category											
	Optimal		Suboptimal			Marginal			Poor			
	Subtotal from previous page											
8. Bank Vegetative Protection (score each bank)	More than 90% of the stream bank surfaces covered by natural vegetation, including trees, shrubs or other plants; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.		70-90% of the stream bank surfaces covered by natural vegetation, but one class of plants is not well-represented; vegetative disruption evident; more than one half of the potential plant stubble height remaining.			50-70% of the stream bank surfaces covered by vegetation; patches of bare soil or closely cropped vegetation common; less than one half of the potential plant stubble height remaining.			Less than 50% of the stream bank surfaces covered by vegetation; disruption of stream bank vegetation is very high; vegetation has been removed to 2 inches or less in average stubble height.			
Score (Left Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
Score (Right Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
9. Condition of Banks (score each bank)	Banks stable; no evidence of erosion or bank failure; little potential for problems.		Moderately stable; infrequent, small areas of erosion mostly healed over.			Moderately unstable; up to 60% of banks in site have areas of erosion; high erosional potential during floods.			Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank collapse or failure; 60-100% of bank has erosional scars.			
Score (Left Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
Score (Right Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
10. Riparian Vegetative Zone (score each bank riparian zone)	Width of riparian zone >50 feet; no evidence of human activities (i.e. parking lots, roadbeds, clear cuts, mowed areas, or crops) within the riparian zone.		Width of riparian zone 35-40 feet.			Width of riparian zone 20-35 feet.			Width of riparian zone less than 20 feet.			
Score (Left Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
Score (Right Bank) _____	10	9	8	7	6	5	4	3	2	1	0	
Total Score _____	÷2 = _____ Habitat Index Score											

Muddy Bottom Habitat Assessment Guide

Overall Assessment	Percent Similarity to Reference Score	Habitat Quality Category	General Attributes
<input type="checkbox"/>	>90%	Excellent	Comparable to the best situation to be expected within an ecoregion. Excellent overall habitat structure conducive to supporting healthy biological community.
<input type="checkbox"/>	75-88%	Good	Habitat structure slightly impaired. Diverse instream habitat generally well-developed. Some degradation of riparian zone and banks. A small amount of channel alteration may be present.
<input type="checkbox"/>	60-73%	Fair	Loss of habitat compared to reference. Habitat is a major limiting factor to supporting a healthy biological community.
<input type="checkbox"/>	<58%	Poor	Severe habitat alteration at all levels.
NOTE: If your score falls between ranges consider the site's habitat assessment results and chemical data, if available, in making your decision.			

Comments:

Annual Fall Habitat Assessment

Rocky Bottom Sampling Field Data Sheet

Habitat Parameter	Category			
	Optimal	Suboptimal	Marginal	Poor
1. Attachment Sites for Macro-invertebrates Well developed riffle and run; riffle is as wide as stream and length extends 2 times the width of stream; cobble predominate; boulders and gravel common. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Embeddedness Fine sediment surrounds and fills in 0-25% of the living spaces around and in between the gravel, cobble, and boulders. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. Shelter for Fish Snags, submerged logs, undercut banks, cobble and large rocks, or other stable habitat are found in over 50% of the site. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. Sediment Deposition Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
5. Stream Velocity and Depth Combinations Slow (< 1 ft/s)/deep (>1.5 ft); slow/shallow; fast/deep; fast/shallow combinations all present. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
6. Channel Alteration Stream straightening, dredging, artificial embankments, dams or bridge abutments absent or minimal; stream with meandering pattern. Score _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
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