Stream Habitat Assessment

Site: Two Lick Waterworks
Date: 10-May-17
Time: 9:00 a.m.

Parameter	Category	Score (1-20)
Attachment sites	Suboptimal	14
Embeddedness	Marginal	8
Shelter for fish and macros	Suboptimal	14
Channel Alteration	Marginal	10
Sediment deposition	Suboptimal	12
Stream velocity & depth combinations	Suboptimal	15
Channel flow status	Optimal	17
Bank vegetation protection:		
Left Bank	Optimal	9
Right Bank	Optimal	10
Condition of banks:		
Left Bank	Suboptimal	8
Right Bank	Optimal	9
Riparian Vegetative Zone width:		
Left Bank	Marginal	5
Right Bank	Suboptimal	7
Total Score (200 points possible)		**138**

Categories: *Optimal (Score 16-20)*
Suboptimal (Score 11-15)
Marginal (Score 6-10)
Poor (Score 1-5)

Water Monitoring Field Data Sheet

Sediment deposits: Sand
No unusual sediments
Stream type: Straight
Dams present? Yes
Level of high water: .33 me(estimate)
Stream/Bank cross-section: Rectangular
Stream bank erosion: Occasional areas of erosion

Stream bottom

Inorganic	%	Organic	%
Bedrock (solid)	5	Muck-mud	5
Boulder (>25 cm diameter)	10	Pulpy peat (unrecognizable plant parts)	5
Cobble (6.25 cm- 25 cm)	25	Fibrous peat (partially decomposed plants)	5
Gravel (.25 cm - 6.25 cm)	35	Detritus (sticks, wood, coarse plant material)	35
Sand (up to .25 cm)	15	Logs, limbs	25
Silt (soft, fine sand)	5	Marl (gray, shell fragments)	25
Clay	5	Other	0
Other	0		

Predominant Surrounding Land Use

Habitat	%
Wetlands	20
Forest	50
Cropland	0
Pasture	0
Residential	0
Commercial	0
Industrial	0
Unused/abandoned	5
Overgrown shrubs/small trees	15
Other	0

Macroinvertebrate Count

Date:	10-May		11-May	
Group 1: Sensitive	***Count***	***Code***	***Count***	***Code***
Water Penny Larvae	0	-	0	-
Hellgrammite	9	R	8	R
Mayfly Nymph	60	C	15	C
Gilled Snails	0	-	0	-
Riffle Beetle Adults	0	-	4	R
Non net-spinning Caddisfly Larva	9	R	8	R
Stonefly Larvae	32	C	7	R
Group 2: Somewhat Sensitive				
Beetle Larvae	18	C	1	R
Clams	4	R	3	R
Cranefly Larvae	0	-	0	-
Crayfish	5	R	3	R
Damselfly Nymphs	0	-	0	-
Dragonfly Nymphs	0	-	0	-
Scuds	0	-	0	-
Sowbugs	0	-	0	-
Fishfly Larvae	0	-	0	-
Alderfly Larvae	0	-	1	R
Net-spinning Caddisfly Larvae	20	C	24	C
Group 3: Pollution Tolerant				
Aquatic Worms	3	R	0	-
Blackfly Larvae	11	C	2	R
Leeches	0	-	0	-
Midge Larvae	5	R	2	R
Snails	2	R	1	R

Codes:	*R= Rare (1-9 organisms)*				
	C=Common (10-99 organisms)				
	D=Dominant (100+ organisms)				
Sample 1:					
Index Values:					
Sensitive	# of R's	2	5	10	
	# of C's	**2**	**5.6**	11.2	
	# of D's	0	5.3	0	Good= >40
	Sum:			21.2	Fair= 20-40
Somewhat Sensitive					Poor = <20
	# of R's	2	3.2	6.4	
	# of C's	2	3.4	6.8	
	# of D's	0	3	0	
	Sum:			13.2	
Tolerant	# of R's	3	1.2	3.6	
	# of C's	1	1.1	1.1	
	# of D's	0	1	0	
	Sum:			4.7	
			Total Score:	39.1	

Codes:	*R= Rare (1-9 organisms)*				
	C=Common (10-99 organisms)				
	D=Dominant (100+ organisms)				
Sample 2:					
Index Values:					
Sensitive	# of R's	4	5	20	
	# of C's	**1**	**5.6**	5.6	Good= >40
	# of D's	0	5.3	0	Fair= 20-40
	Sum:			25.6	Poor = <20
Somewhat Sensitive					
	# of R's	4	3.2	12.8	
	# of C's	1	3.4	3.4	
	# of D's	0	3	0	
	Sum:			16.2	
Tolerant	# of R's	3	1.2	3.6	
	# of C's	0	1.1	0	
	# of D's	0	1	0	
	Sum:			3.6	
			Total Score:	45.4	