

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Stream Monitor(s) Warm Springs Run Level 3 Date(s) 14 May 2015
 Direction Jones, Dean and O'Brien
Behind Earth Dog Café on Route 9 Start time 0800 hours
 County Morgan
 RR Miles _____ Station Earth Dog
 Latitude

39	37	25
----	----	----

 Longitude

78	13	50
----	----	----

 Watershed Warm Springs
 Database code _____

WATER CHEMISTRY

	Result	Units		Result	Units		Result	Units
Temp. (°F or °C)	12		Alkalinity	122		Fecal coliform/E-coli		
pH	8		Nitrate/Nitrite	2	ppm	Iron	0	
Conductivity			Phosphates			Aluminum		
Dissolved O ₂			Total Dissolved Solids			Manganese		
Acidity			Turbidity			Other (describe below)		

Describe other conditions analyzed: _____

PHYSICAL CONDITIONS

Water clarity Clear Algae color Brown
 Water color none Algae abundance Scattered
 Water/Sediment odor

None	None
------	------

 Algae texture Even coating
 Streambed color brown Surface foam none
 Comments _____

Riffle width _____ Run width _____ Pool width

--	--

 Riffle depth _____ Run depth _____ Pool depth _____
 Feet Meter
 Indicate units

Estimate

yes

 Count

--

 Silt/clay Sand Fine gravel Coarse gravel Cobble Entire reach

yes

 Riffles only

--

 Boulder Bedrock Woody debris

Index	10	80	10	Woody debris adjustment	% Riffles	% Runs	% Pools
	2.90	Marginal					

HABITAT CONDITIONS

Attachment sites	4	Channel flow status	17	Embeddedness	4
Riffle frequency	7	Channel alterations	18	Bank veg. protection	7 7
Velocity/depth	8	Sediment deposition	18	Bank stability	8 8
Total Score	110	Channel shade	60-80%	Riparian buffer	2 2

Integrity Rating

Marginal

 width

--

Comments _____

BIOLOGICAL CONDITIONS

Richness	Composition	Tolerance			
Total Taxa <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">11</td></tr></table>	11	% EPT Abundance <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">16.8</td></tr></table>	16.8	Biotic Index <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">5.28</td></tr></table>	5.28
11					
16.8					
5.28					
EPT Taxa <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">5</td></tr></table>	5	% Dominance <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">37.6</td></tr></table>	37.6	% Tolerant <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">29.7</td></tr></table>	29.7
5					
37.6					
29.7					
Other aquatic organisms observed or collected (e.g. fish, salamanders etc.), or additional comments: _____		Stream Score <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">54.1</td></tr></table>	54.1		
54.1					
		Integrity Rating <table border="1" style="display: inline-table;"><tr><td style="width: 50px; height: 20px;"></td></tr></table>			

Discharge (cfs) _____

	Water level	Low	Normal	High	No flow
			yes		

Current/past weather conditions: Sunny 60 degrees No rain past 48 hours

LAND USE IMPACTS: Indicate the types of land uses that affect your stream reach and their approximate location using the code: **(S)** streamside, **(M)** within ¼ mile, and **(W)** within the watershed. Also estimate the level of impact with the numeric codes **(1)** slight, **(2)** moderate, or **(3)** for high impacts.

	Impact	Location		Impact	Location
Single family residences	1	S	Trash dumps		
Sub-urban developments	1	W	Intensive feedlots		
Urban areas			Pastureland	2	W
Industrial areas			Cropland		
Parking lots, malls etc.	1	S	Oil & gas wells		
Bridges	1	S	Logging		
Paved roads	1	S	Mountaintop mining		
Unpaved roads	1	S	Abandoned mining		
Active construction	1	W	Deep mining		
Parks, trails etc			Quarries		
Other recreation			Other (describe)		
Landfills					

Comments: _____

Pipes?

yes

 Yes

--

 No

--

BENTHIC MACROINVERTEBRATES: Record the total number of each macroinvertebrate collected. Note: In the VAD the macroinvertebrates are recorded in three columns based upon their tolerance rating.

Low	Total	Moderate	Total	High	Total
Ameletidae (Ameletid minnow mayfly)		Baetidae (Small minnow mayfly)		Coenagrionidae (Narrow-wing damselfly)	
Ephemerelellidae (Spiny-crawler mayfly)	2	Beatiscidae (Armored mayfly)		Lestidae (Spread-wing damselfly)	
Heptageniidae (Flatheaded mayfly)	2	Caenidae (Square-gilled mayfly)		Libellulidae (Skimmer dragonfly)	
Isonychiidae (Brush-legged mayfly)	1	Ephemeraeidae (Burrowing mayfly)		Chrysomelidae (Reed beetle)	
Leptophlebiidae (Prong-gilled mayfly)		Potamanthidae (Hackle-gilled mayfly)		Dytiscidae (Predacious diving beetle)	
Siphonuridae (Primitive minnow mayfly)		Tricorythidae (Stout-crawler mayfly)		Haliplidae (Crawling water beetle)	
Capniidae (Small winter stonefly)		Hydropsychidae (Common netspinner)		Hydrophilidae (Water scavenger beetle)	
Chloroperlidae (Green stonefly)		Hydroptilidae (Purse-case caddisfly)		Belostomatidae (Giant water bug)	
Leuctridae (Rolled-wing stonefly)		Molannidae (Hooded-case caddisfly)		Corixidae (Water boatman)	
Nemouridae (Little brown stonefly)		Phryganeidae (Giant-case caddisfly)		Gerridae/Veliidae (Water striders)	
Perlidae (Common stonefly)	6	Polycentropodidae (Tube-net caddisfly)		Hydrometridae (Water measurer)	
Perlodidae (Patterned stonefly)		Psychomiidae (Trumpet-net caddisfly)		Nepidae (Water scorpion)	

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Peltoperlidae (Roach-like stonefly)		Pyrilidae (Aquatic moth)		Notonectidae (Backswimmer)	
Pteronarcyidae (Giant stonefly)		Calopterygidae (Broad-wing damselfly)		Ceratopogonidae (Biting midge)	
Taeniopterygidae (Large winter stonefly)		Gomphidae (Clubtail dragonfly)		Chironomidae (Non-biting midge)	14
Brachycentridae (Humpless-case caddisfly)		Dryopidae (Long-toed beetle)		Culicidae (Mosquito)	
Glossosomatidae (Saddle-case caddisfly)		Elmidae (Riffle beetle)	38	Muscidae (Muscid fly)	
Goeridae (Goerid-case caddisfly)		Gyrinidae (Whirligig beetle)		Psychodidae (Moth fly)	
Helicopsychidae (Snail-case caddisfly)		Sialidae (Alderfly)		Ptychopteridae (Phantom cranefly)	
Lepidostomatidae (Case-maker caddisfly)		Entomobryidae (Springtail)		Stratiomyidae (Soldier fly)	
Leptoceridae (Longhorn-case caddisfly)		Dixidae (Dixid midge)		Syrphidae (Rat-tailed maggot)	
Limnephilidae (Northern-case caddisfly)		Empididae (Dance fly)		Tabanidae (Horse fly)	
Philopotamidae (Finger-net caddisfly)	6	Simuliidae (Black fly)		Asellidae (Aquatic sowbug)	
Rhyacophilidae (Free-living caddisfly)		Tipulidae (Crane fly)		Ancylidae (Limpet snail)	
Uenoidae (Uenoid-case caddisfly)		Hydrachnidae (Water mites)		Physidae (Left-handed snail)	
Aeshnidae (Damner dragonfly)		Cambaridae (Crayfish)		Planorbidae (Orb snail)	
Cordulegastridae (Spiketail dragonfly)		Gammaridae (Sideswimmer)	1	Hirudinea (Leech)	6
Psephenidae (Water penny)	15	Palaemonidae (Freshwater shrimp)		Nematoda (Round worm)	
Corydalidae (Hellgrammite/Fishfly)		Bithyniidae (Bithynid snail)		Nematomorpha (Horsehair worm)	
Athericidae (Watersnipe fly)		Pleuroceridae (Rock snail)		Oligochaeta (Aquatic worm)	10
Blephariceridae (Net-wing midge)		Viviparidae (Viviparid snail)		Turbellaria (Flatworms)	
Hydrobiidae (Pebble snail)		Corbiculidae (Asian clam)		Tolerance unknown	
Unionidae (Mussel)		Sphaeriidae (Pea clam)		Hydrozoa (Freshwater jellyfish)	
				Neuroptera (Spongilliflies)	
				Spongilla (Freshwater sponge)	