

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Stream Monitor(s) Warm Springs Run / Yellow Run Level 3 Date(s) 14 May 2j015  
 Direction Jones, Dean, Lehman, Iliff, Oaks, O'Brien  
Route 522 and Route 9 Behind Coldwell Office Start time 0800 hours  
 County Morgan  
 RR Miles \_\_\_\_\_ Station Coldwell  
 Latitude 

39	37	28
----	----	----

 Longitude 

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

 Watershed Warm Springs  
 Database code \_\_\_\_\_

**WATER CHEMISTRY**

	Result	Units		Result	Units		Result	Units
Temp. (°F or °C)	12	c	Alkalinity	120		Fecal coliform/E-coli		
pH	8		Nitrate/Nitrite	1	ppm	Iron	0	
Conductivity			Phosphates			Aluminum		
Dissolved O <sub>2</sub>			Total Dissolved Solids			Manganese		
Acidity			Turbidity	0	jtu	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

	10	30	40	20			
<b>Index</b>	<b>3.10</b>		Woody debris adjustment		% Riffles	% Runs	% Pools

**HABITAT CONDITIONS**

Attachment sites	20	Channel flow status	15	Embeddedness	15	
Riffle frequency	18	Channel alterations	20	Bank veg. protection	5	7
Velocity/depth	15	Sediment deposition	15	Bank stability	8	8
<b>Total Score</b>	<b>151</b>	Channel shade	60%-80%	Riparian buffer	3	2

Integrity Rating 

<b>suboptimal</b>
-------------------

 width 

--	--

Comments \_\_\_\_\_

**BIOLOGICAL CONDITIONS**

<b>Richness</b>	<b>Composition</b>	<b>Tolerance</b>			
Total Taxa <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">13</td></tr></table>	13	% EPT Abundance <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">34.7</td></tr></table>	34.7	Biotic Index <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">4.32</td></tr></table>	4.32
13					
34.7					
4.32					
EPT Taxa <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">8</td></tr></table>	8	% Dominance <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">33.2</td></tr></table>	33.2	% Tolerant <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">13.7</td></tr></table>	13.7
8					
33.2					
13.7					
Other aquatic organisms observed or collected (e.g. fish, salamanders etc.), or additional comments: _____					
		<b>Stream Score</b> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;"><b>68.7</b></td></tr></table>	<b>68.7</b>		
<b>68.7</b>					
		Integrity Rating <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">suboptimal</td></tr></table>	suboptimal		
suboptimal					

Discharge (cfs) \_\_\_\_\_

	Water level	Low	Normal	High	No flow
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Current/past weather conditions: Sunny 60 degrees Last days temp 60-80 degrees and sunny

**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	W	Abandoned mining		
Active construction	1	W	Deep mining		
Parks, trails etc			Quarries		
Other recreation			Other (describe)		
Landfills					

Comments: \_\_\_\_\_

	Pipes?	Yes	No
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**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)	4	Coenagrionidae (Narrow-wing damselfly)	
Ephemerelellidae (Spiny-crawler mayfly)		Beatiscidae (Armored mayfly)		Lestidae (Spread-wing damselfly)	
Heptageniidae (Flatheaded mayfly)	8	Caenidae (Square-gilled mayfly)		Libellulidae (Skimmer dragonfly)	
Isonychiidae (Brush-legged mayfly)	7	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)		Halipilidae (Crawling water beetle)	
Capniidae (Small winter stonefly)		Hydropsychidae (Common netspinner)	34	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)	4	Phryganeidae (Giant-case caddisfly)		Gerridae/Veliidae (Water striders)	
Perlidae (Common stonefly)	6	Polycentropodidae (Tube-net caddisfly)		Hydrometridae (Water measurer)	
Perlodidae (Patterned stonefly)	8	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)	36
Brachycentridae (Humpless-case caddisfly)		Dryopidae (Long-toed beetle)		Culicidae (Mosquito)	
Glossosomatidae (Saddle-case caddisfly)		Elmidae (Riffle beetle)	31	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)	20	Simuliidae (Black fly)	4	Asellidae (Aquatic sowbug)	
Rhyacophilidae (Free-living caddisfly)		Tipulidae (Crane fly)	13	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)		Hirudinea (Leech)	
Psephenidae (Water penny)	87	Palaemonidae (Freshwater shrimp)		Nematoda (Round worm)	
Corydalidae (Hellgrammite/Fishfly)		Bithyniidae (Bithynid snail)		Nematomorpha (Horsehair worm)	
Athericidae (Watersnipe fly)		Pleuroceridae (Rock snail)		Oligochaeta (Aquatic worm)	
Blephariceridae (Net-wing midge)		Viviparidae (Viviparid snail)		Turbellaria (Flatworms)	
Hydrobiidae (Pebble snail)		Corbiculidae (Asian clam)		<b>Tolerance unknown</b>	
Unionidae (Mussel)		Sphaeriidae (Pea clam)		Hydrozoa (Freshwater jellyfish)	
				Neuroptera (Spongilliflies)	
				Spongilla (Freshwater sponge)	