

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Stream Monitor(s) Yellow Run Level 3 Date(s) 8/22/17
Oaks, Iliff, Lehman, Swaim, Trump and Dean

Route 9 and Route 522 at Traffic Light Start time 8:AM

County Morgan

RR Miles _____ Station Sheetz

Latitude

39	31	84
----	----	----

 Longitude

78	13	45
----	----	----

 Watershed _____

Database code _____

WATER CHEMISTRY

	Result	Units		Result	Units		Result	Units
Temp. (°F or °C)	20	c	Alkalinity	145		Fecal coliform/E-coli		
pH	7.5		Nitrate/Nitrite	0		Iron	0	
Conductivity			Phosphates			Aluminum		
Dissolved O ₂	120	%	Total Dissolved Solids			Manganese		
Acidity			Turbidity			Other (describe below)		

Describe other conditions analyzed: Oxygen 10 ppm

PHYSICAL CONDITIONS

Water clarity	<u>Clear</u>	Algae color	<u>brown</u>
Water color	<u>None</u>	Algae abundance	<u>scattered</u>
Water/Sediment odor	<u>None</u> <u>none</u>	Algae texture	<u>Even coating</u>
Streambed color	<u>brown</u>	Surface foam	<u>none</u>
Comments	_____		

Riffle width _____ Run width _____ Pool width _____
 Riffle depth _____ Run depth _____ Pool depth _____
 Feet Meters
 Indicate units

Estimate

--

 Count

--

 Silt/clay Sand Fine gravel Coarse gravel Cobble Entire reach Boulder

--

 Riffles only

--

 Bedrock Woody debris

Index	Woody debris adjustment	% Riffles	% Runs	% Pools

HABITAT CONDITIONS

Attachment sites	20	Channel flow status	9	Embeddedness	19
Riffle frequency	15	Channel alterations	19	Bank veg. protection	10 10
Velocity/depth	9	Sediment deposition	20	Bank stability	7 7

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Total Score	147	Channel shade	<80%	Riparian buffer width	1	1
Integrity Rating	good					

BIOLOGICAL CONDITIONS

Richness		Composition		Tolerance	
Total Taxa	10	% EPT Abundance	56	Biotic Index	4.04
EPT Taxa	3	% Dominance	32.2	% Tolerant	2.5
Other aquatic organisms observed or collected (e.g. fish, salamanders etc.), or additional comments:				Stream Score	66.7
				Integrity Rating	suboptimal

8 salamanders

Discharge (cfs)	Water flow too low to measure	Water level	Low	Normal	High	No flow
			x			

Current/past weather conditions:

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			Intensive feedlots		
Urban areas			Pastureland		
Industrial areas			Cropland		
Parking lots, malls etc.	3	s	Oil & gas wells		
Bridges	1	s	Logging		
Paved roads	2	s	Mountaintop mining		
Unpaved roads			Abandoned mining		
Active construction			Deep mining		
Parks, trails etc			Quarries		
Other recreation			Other (describe)		
Landfills					

Comments: _____ Pipes? 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)	
Ephemereleidae (Spiny-crawler mayfly)		Beatiscidae (Armored mayfly)		Lestidae (Spread-wing damselfly)	
Heptageniidae (Flatheaded mayfly)		Caenidae (Square-gilled mayfly)		Libellulidae (Skimmer dragonfly)	
Isonychiidae (Brush-legged mayfly)		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)	15	Hydrophilidae (Water scavenger beetle)	
Chloroperlidae (Green stonefly)		Hydroptilidae (Purse-case caddisfly)		Belostomatidae (Giant water bug)	
Leuctridae (Rolled-wing stonefly)	14	Molannidae (Hooded-case caddisfly)		Corixidae (Water boatman)	
Nemouridae (Little brown stonefly)		Phryganeidae (Giant-case caddisfly)		Gerridae/Veliidae (Water striders)	

WV SAVE OUR STREAMS ADVANCED SURVEY SUMMARY

Perlidae (Common stonefly)		Polycentropodidae (Tube-net caddisfly)		Hydrometridae (Water measurer)	
Perlodidae (Patterned stonefly)		Psychomiidae (Trumpet-net caddisfly)		Nepidae (Water scorpion)	
Peltoperlidae (Roach-like stonefly)		Pyralidae (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)	
Brachycentridae (Humpless-case caddisfly)		Dryopidae (Long-toed beetle)		Culicidae (Mosquito)	
Glossosomatidae (Saddle-case caddisfly)		Elmidae (Riffle beetle)	18	Muscidae (Muscid fly)	
Goeridae (Goerid-case caddisfly)		Gyrinidae (Whirligig beetle)		Psychodidae (Moth fly)	
Helicopsychidae (Snail-case caddisfly)		Sialidae (Alderfly)		Ptychopteridae (Phantom crane fly)	
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)	39	Simuliidae (Black fly)		Asellidae (Aquatic sowbug)	
Rhyacophilidae (Free-living caddisfly)		Tipulidae (Crane fly)	1	Ancylidae (Limpet snail)	
Uenoidae (Uenoid-case caddisfly)		Hydrachnidae (Water mites)		Physidae (Left-handed snail)	
Aeshnidae (Damner dragonfly)		Cambaridae (Crayfish)	11	Planorbidae (Orb snail)	1
Cordulegastridae (Spiketail dragonfly)		Gammaridae (Sideswimmer)		Hirudinea (Leech)	3
Psephenidae (Water penny)	16	Palaemonidae (Freshwater shrimp)	3	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)		Tolerance unknown	
Unionidae (Mussel)		Sphaeriidae (Pea clam)		Hydrozoa (Freshwater jellyfish)	
				Neuroptera (Spongilliflies)	
				Spongilla (Freshwater sponge)	