

BUTZRU04

LOCATION: Approximately 25 yards upstream of southerly bridge on Rt. 715.

Latitude 41° 04' 23.00"

Longitude -75° 16' 46.00"

FIELD CHEMISTRY:

SITE ID	SAMPLE DATE	TEMP C	SpC mScm	DO mg/l	pH su	ORP mV	DO % sat.	COND mS/cm	TDS mg/l
BUTZRU04	5/7/03	18.31	290	5.42	7.03	301	57.70	253	189
BUTZRU04	6/29/03	26.25	186	6.90	7.21	312	85.40	190	121
BUTZRU04	7/19/03	23.42	271	5.54	7.02	359	65.10	263	176
BUTZRU04	8/13/03	23.23	244	7.57	7.25	343	88.70	236	159
BUTZRU04	9/16/03	19.19	219	9.54	7.18	348	103.30	195	142
BUTZRU04	10/16/03	12.86	221	9.60	7.93	319	90.80	170	144
BUTZRU04	11/29/03	6.08	209	11.62	7.24	325	93.60	134	136
BUTZRU04	12/13/03	3.29	164	12.67	7.42	311	94.90	96	107
BUTZRU04	1/26/04	1.14	315	12.20	7.88	376	86.20	171	205
BUTZRU04	2/23/04	2.93	341	14.37	8.11	180	106.70	197	221
BUTZRU04	3/15/04	6.45	340	12.93	7.25	305	105.20	220	221
BUTZRU04	4/13/04	9.00	247	11.88	7.12	276	102.90	171	160
wshed min.		0.01	29	5.42	5.47	46	57.70	1	19
wshed max.		26.25	548	14.37	8.99	561	113.10	388	356
wshed avg.		10.04	146	10.97	7.50	304	96.14	104	95

Temperatures that exceed Specific Water Quality Criteria in Chapter 93 of Title 25 of the PA Code are shown in red. SpC is specific conductance. DO is dissolved oxygen. ORP is oxidation reduction potential. COND is conductivity. TDS is total dissolved solids. Refer to Sampling and Analysis Plan under Phase I study results for quality assurance/quality control information.

LABORATORY DATA:

SITE ID	SAMPLE DATE	pH	NITRATE	NITRITE	TOTAL SUPSENDED	TOTAL PHOSPHORUS	FECAL COLIFORM
		su	mg/l	mg/l	SOLIDS mg/l	mg/l	CFU/100ml
BUTZRU04	8/13/03	6.82	0.13	0.01	<1.0	0.02	145
Wshed min		5.47	0.10	0.005	1.0	0.01	0
Wshed max		8.19	1.51	0.050	13.0	0.90	5700
Wshed avg		6.85	0.50	0.019	2.7	0.11	

If the number of sample results where the analytical parameter was not detected exceeded 20% of the sample pool, they were not included in the calculated watershed average. If the number of non-detect samples was less than 20% of the sample pool, ½ of the detection limit was used to represent those samples in the calculated watershed average. Refer to Sampling and Analysis Plan under Phase I of study results for quality assurance/quality control information.

BENTHIC MACROINVERTEBRATES:

This site was added through the generosity of the Monroe County Planning Commission in 2003 for the first time. The score of 15 was considered “Severely Impaired” and the site has not been resurveyed.

The range 35 - 29 is considered optimal. The range 28 - 14 is the slightly to moderately impaired category, and any site with a total score of less than 14 is considered severely impaired.

HABITAT ANALYSIS 2003

BUTZRU04	189	Suboptimal- Optimal	Only 2 of the 4 velocity/depth regimes present. Occurrence of riffles relatively frequent. Width of riparian zone 12-18 meters.
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MACROINVERTEBRATE IDENTIFICATIONS

2003 MONROE COUNTY WATER QUALITY STUDY

SITE ID: BUTZRU04

Insecta		Philopotamidae		Simuliidae	18
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae		Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae		Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	2
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	60
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	6
Lestidae		Hydraenidae		Physidae	23
Plecoptera		Hydrophilidae	2	Planorbidae	3
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	2
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			

Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	53	
Trichoptera		Culicidae		
Hydropsychidae	67	Muscidae		

Pebble Count (Cross Section)

BUTZRU04

Material	Size Range (mm)		Particle Count	Cumulative Percent
silt/clay	0	0.062	0	0%
very fine sand	0.062	0.13	0	0%
fine sand	0.13	0.25	0	0%
medium sand	0.25	0.5	0	0%
coarse sand	0.5	1	2	2%
very coarse sand	1	2	0	2%
very fine gravel	2	4	0	2%
fine gravel	4	6	0	2%
fine gravel	6	8	3	5%
medium gravel	8	11	6	11%
medium gravel	11	16	2	13%
coarse gravel	16	22	5	18%
coarse gravel	22	32	0	18%
very coarse gravel	32	45	7	25%
very coarse gravel	45	64	16	41%
small cobble	64	90	23	64%
medium cobble	90	128	20	84%
large cobble	128	180	11	95%
very large cobble	180	256	5	100%
small boulder	256	362	0	100%
small boulder	362	512	0	100%
medium boulder	512	1024	0	100%
large - very large boulder	1024	2048	0	100%
bedrock	2048	4096	0	100%
Total Particle Count:			100	

