

BUTZRU03

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

Latitude 41° 04' 24.20"

Longitude -75° 16' 46.00"

FIELD CHEMISTRY:

SITE ID	SAMPLE	TEMP	SpC	DO	pH	ORP	DO	COND	TDS
	DATE	C	mScm	mg/l	su	mV	% sat.	mS/cm	mg/l
BUTZRU03	4/13/03	9.48	97	10.94	7.14	264	95.70	68	63
BUTZRU03	5/7/03	16.86	95	5.84	7.02	303	60.30	80	62
BUTZRU03	6/29/03	24.47	83	6.93	7.07	316	83.10	82	54
BUTZRU03	7/19/03	19.24	96	8.35	7.13	365	90.40	85	62
BUTZRU03	8/13/03	24.27	72	7.36	7.36	336	87.90	71	47
BUTZRU03	9/16/03	19.32	68	9.47	7.29	329	102.70	60	44
BUTZRU03	10/16/03	12.86	85	10.00	8.21	305	94.70	65	55
BUTZRU03	11/29/03	6.00	70	11.73	7.43	303	94.30	45	46
BUTZRU03	12/13/03	2.89	56	12.74	7.74	273	94.40	32	37
BUTZRU03	1/26/04	0.01	46	11.97	8.37	404	81.90	24	30
BUTZRU03	2/23/04	2.70	102	13.26	8.53	134	97.70	59	67
BUTZRU03	3/15/04	7.07	89	12.13	7.45	277	100.10	59	58
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
BUTZRU03	8/13/03	6.84	<0.1	0.005	<1.0	0.03	6
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 13 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

BUTZRU03	186	Suboptimal- Optimal	Riffle is as wide as stream, but length is less than two times width. Only 3 of the 4 velocity/depth regimes present. Width of riparian zone 12-18 meters.
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MACROINVERTEBRATE IDENTIFICATIONS

2003 MONROE COUNTY WATER QUALITY STUDY

SITE ID: BUTZRU03

Insecta		Philopotamidae	1	Simuliidae	54
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	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	22
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	

Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	6	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	31		
Trichoptera		Culicidae			
Hydropsychidae	105	Muscidae			

Pebble Count (Cross Section)

BUTZRU03

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	0	0%
very coarse sand	1	2	1	1%
very fine gravel	2	4	0	1%
fine gravel	4	6	5	6%
fine gravel	6	8	4	10%
medium gravel	8	11	2	12%
medium gravel	11	16	10	22%
coarse gravel	16	22	11	33%
coarse gravel	22	32	13	46%
very coarse gravel	32	45	5	51%
very coarse gravel	45	64	2	53%
small cobble	64	90	4	57%
medium cobble	90	128	10	67%
large cobble	128	180	7	74%
very large cobble	180	256	4	78%
small boulder	256	362	4	82%
small boulder	362	512	5	87%
medium boulder	512	1024	3	90%
large - very large boulder	1024	2048	10	100%
bedrock	2048	4096	0	100%
Total Particle Count:			100	

