

## BUTZRU02

**LOCATION:** Approximately 25 yards upstream of Club House Road.

Latitude 41° 04' 13.00"

Longitude -75° 15' 30.90"

### 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
BUTZRU02	4/13/03	8.18	124	11.33	7.41	270	96.10	84	81
BUTZRU02	5/7/03	14.84	138	6.53	7.40	289	64.60	112	90
BUTZRU02	6/28/03	21.04	103	8.89	7.42	284	99.90	95	67
BUTZRU02	7/19/03	17.23	132	9.66	7.36	360	100.40	112	86
BUTZRU02	8/13/03	21.68	118	8.45	7.54	275	96.00	111	77
BUTZRU02	9/16/03	18.57	95	10.16	7.84	267	108.50	84	62
BUTZRU02	10/16/03	12.27	106	10.59	7.79	322	98.90	80	69
BUTZRU02	11/29/03	6.22	84	11.95	7.88	292	96.50	54	54
BUTZRU02	12/13/03	2.59	82	13.18	8.00	292	96.80	47	53
BUTZRU02	1/29/04	0.30	133	13.04	8.99	437	90.00	70	87
BUTZRU02	2/23/04	1.69	158	13.81	8.19	178	99.10	87	102
BUTZRU02	3/15/04	6.69	126	12.05	7.48	291	98.60	82	82
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
BUTZRU02	8/13/03	7.07	<0.1	0.01	<1.0	0.06	11
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 21 was considered “Moderately 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**

BUTZRU02	194	Optimal	Only 3 of the 4 velocity/depth regimes present. More than 90% of the streambank surfaces covered by vegetation. Less than 5% of the bottom affected by sediment deposition.
----------	-----	---------	---

**MACROINVERTEBRATE IDENTIFICATIONS**

**2003 MONROE COUNTY WATER QUALITY STUDY**

**SITE ID: BUTZRU02**

Insecta		Philopotamidae	6	Simuliidae	36
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	21	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	7	Leptoceridae		Nematomorpha	
Leptophlebiidae	3	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	38	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	3	Dytiscidae		Sphaeriidae	1
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	4	Ancylidae	2
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	7	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae	4	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae	1	Hydrachnidia	
Mesoveliidae		Blephariceridae			

Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	37	
Trichoptera		Culicidae		
Hydropsychidae	32	Muscidae		

### Pebble Count (Cross Section)

BUTZRU02

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	1	1%
medium sand	0.25	0.5	0	1%
coarse sand	0.5	1	0	1%
very coarse sand	1	2	4	5%
very fine gravel	2	4	3	8%
fine gravel	4	6	8	16%
fine gravel	6	8	5	21%
medium gravel	8	11	12	33%
medium gravel	11	16	7	40%
coarse gravel	16	22	8	48%
coarse gravel	22	32	5	53%
very coarse gravel	32	45	9	62%
very coarse gravel	45	64	7	69%
small cobble	64	90	14	83%
medium cobble	90	128	10	93%
large cobble	128	180	1	94%
very large cobble	180	256	2	96%
small boulder	256	362	3	99%
small boulder	362	512	0	99%
medium boulder	512	1024	1	100%
large - very large boulder	1024	2048	0	100%
bedrock	2048	4096	0	100%
Total Particle Count:			100	

