

SWIFCR08

LOCATION: At the westerly boundary of the Pocono Manor property.

Latitude 41° 05' 45.00"

Longitude -75° 23' 17.30"

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
SWIFCR08	4/13/03	8.71	149	10.77	6.22	561	92.60	103	97
SWIFCR08	5/23/03	9.09	127	10.48	6.18	360	90.90	88	82
SWIFCR08	7/26/03	11.18	121	10.41	6.56	292	94.80	89	79
SWIFCR08	8/14/03	10.91	123	10.52	6.37	356	95.20	90	80
SWIFCR08	9/29/03	10.36	121	10.51	6.45	451	93.90	87	79
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 su	NITRATE mg/l	NITRITE mg/l	TOTAL SUPSENDED SOLIDS mg/l	TOTAL PHOSPHORUS mg/l	FECAL COLIFORM CFU/100ml
SWIFCR08	8/14/03	5.93	0.45	<0.005	<1.0	0.12	4
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 29 was considered “Optimal” 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

SWIFCR08	191	Suboptimal- Optimal	30 – 50% mix of boulder, cobble, or other stable habitat Banks stable. 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: SWIFCR08

Insecta		Philopotamidae		Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	3
Baetidae	49	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	5	Poduridae	
Ephemerellidae	12	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae		Nematomorpha	
Leptophlebiidae	24	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	51	Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	4
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	6	Psephenidae		Limnaeidae	
Leuctridae	18	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	

Peltoperlidae	2	Corydalidae		Gammaridae	
Perlidae		Sialidae	1	Talitridae	
Perlodidae	1	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	77		
Trichoptera		Culicidae			
Hydropsychidae	2	Muscidae			

Pebble Count (Cross Section)

SWIFCR08

Material	Size Range (mm)		Particle Count	Cumulative Percent
silt/clay	0	0.062	12	12%
very fine sand	0.062	0.13	0	12%
fine sand	0.13	0.25	2	14%
medium sand	0.25	0.5	0	14%
coarse sand	0.5	1	0	14%
very coarse sand	1	2	0	14%
very fine gravel	2	4	0	14%
fine gravel	4	6	0	14%
fine gravel	6	8	4	18%
medium gravel	8	11	4	22%
medium gravel	11	16	4	26%
coarse gravel	16	22	13	39%
coarse gravel	22	32	3	42%
very coarse gravel	32	45	15	57%
very coarse gravel	45	64	11	68%
small cobble	64	90	10	78%
medium cobble	90	128	11	89%
large cobble	128	180	3	92%
very large cobble	180	256	6	98%
small boulder	256	362	2	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	

