

# MONROE COUNTY

## WATER QUALITY STUDY 2005

Volume II of II – Technical Appendices



MONROE COUNTY PLANNING COMMISSION

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**PREPARED BY MONROE COUNTY GOVERNMENT (2005)**

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## STREAM SAMPLING STATIONS

The following information has been included to facilitate the use of the appendices.

<u>Site Number</u>	<u>Site Id</u>	<u>Date</u> <u>Time Sampled</u>	<u>Description</u>
01	PARACR03	8/8/05 0830	<b>PARADISE CREEK</b> (Paradise) Approximately 150 yards upstream of the railroad bridge on Route 191. Lat. 41° 04' 19.60" Long. -75° 13' 36.40"
02	BUTZRU01	8/8/05 0930	<b>BUTZ RUN</b> (Paradise) Approximately 50 yards upstream of its confluence with Paradise Creek. Lat. 41° 04' 41.20" Long. -75° 13' 44.50"
03	CRCRPA01	8/8/05 1000	<b>CRANBERRY CREEK</b> (Paradise) Approximately 75 yards upstream of Browns Hill Road. Lat. 41° 06' 03.80" Long. -75° 14' 58.60"
04	DEHOCR04	8/8/05 1030	<b>DEVILS HOLE CREEK</b> (Paradise) Approximately 15 yards upstream of its confluence with Paradise Creek Lat. 41° 07' 54.00" Long. -75° 18' 50.00"
05	PARACR04	8/8/05 1115	<b>PARADISE CREEK</b> (Paradise) Approximately 50 yards downstream of confluence of Tank Creek and Yankee Run. Lat. 41° 07' 43.80" Long. -75° 18' 57.80"
06	INDIRU01	8/8/05 1200	<b>INDIAN RUN</b> (Pocono) Immediately upstream of Fairview Ave. Lat. 41° 06' 20.88" Long. -75° 22' 27.05"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
07	FOHIRU01	8/9/05 0830	<b>FOREST HILLS RUN (Paradise)</b> Approximately 25 yards upstream of Lower Swiftwater Road. Lat. 41° 06' 03.10" Long. -75° 16' 20.40"
08	SWIFCR06	8/9/05 0900	<b>SWIFTWATER CREEK (Pocono)</b> Approximately 20 yards upstream of its confluence with Forest Hills Run. Lat. 41° 06' 06.80" Long. -75° 16' 18.80"
09	SWIFCR02	8/9/05 0930	<b>SWIFTWATER CREEK (Pocono)</b> Approximately 25 yards downstream of its confluence with Forest Hills Run. Lat. 41° 06' 03.70" Long. -75° 16' 16.70"
10	PARACR01	8/9/05 1030	<b>PARADISE CREEK (Paradise)</b> Approximately 50 yards upstream of Lower Swiftwater Road. Lat. 41° 06' 07.30" Long. -75° 16' 07.60"
11	FOHIRU09	8/9/05 1100	<b>FOREST HILLS RUN (Paradise)</b> Approximately 25 yards downstream of Carlton Road. Lat. 41° 06' 51.00" Long. -75° 18' 42.30"
12	FOHIRU04	8/9/05 1140	<b>FOREST HILLS RUN (Paradise)</b> Approximately 75 yards upstream of Woodland Road Lat. 41° 06' 46.00" Long. -75° 19' 34.90"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
13	TOBYCR17	8/10/05 0830	<b>TOBYHANNA CREEK (Coolbaugh)</b> Approximately 25 yards upstream of Poly's Run, upstream of S.R. 380. Lat. 41° 10' 06.55" Long. -75° 25' 25.10"
14	TOBYCR18	8/10/05 0915	<b>TOBYHANNA CREEK (Coolbaugh)</b> Approximately 800 yards upstream of Hummler Run. Lat. 41° 10' 05.90" Long. -75° 25' 56.53"
15	TOBYCR01	8/10/05 1000	<b>TOBYHANNA CREEK (Coolbaugh)</b> Approximately 75 yards downstream of S.R. 423 bridge at east boundary of Warnertown & State Game Lands 127. Lat. 41° 09' 43.80" Long. -75° 27' 21.90"
16	SWIFCR07	8/10/05 1030	<b>SWIFTWATER CREEK (Pocono)</b> Approximately 75 yards upstream of S.R. 314. Lat. 41° 06' 02.00" Long. -75° 20' 51.30"
17	SWIFCR05	8/10/05 1100	<b>SWIFTWATER CREEK (Pocono)</b> Approximately 200 yards downstream of sanofi pasteur property. Lat. 41° 05' 41.00" Long. -75° 18' 34.10"
18	SWIFCR03	8/10/05 1120	<b>SWIFTWATER CREEK (Pocono)</b> Immediately downstream of old bridge at the Swiftwater Inn (S.R. 611). Lat. 41° 05' 39.90" Long. -75° 19' 41.70"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
19	BULGRU01	8/11/05 0815	<b>BULGERS RUN</b> (Pocono) Approximately 25 yards downstream of the bridge on Learn Road. Lat. 41° 01' 40.45" Long. -75° 17' 58.85"
20	POCOCR15	8/11/05 0845	<b>POCONO CREEK</b> (Pocono) Approximately 25 yards upstream of the bridge on Rim Rock Drive. Lat. 41° 00' 11.90" Long. -75° 16' 47.40"
21	POCOCR18	8/11/05 0930	<b>POCONO CREEK</b> (Stroud) Approximately 50 yards downstream of Shafers School House Road. Lat. 40° 59' 27.60" Long. -75° 15' 19.10"
22	POCOCR22	8/11/05 1015	<b>POCONO CREEK</b> (Stroud) Approximately 1 mile downstream of Shafers School House Road Lat. 40° 59' 03.32" Long. -75° 14' 59.45"
23	POCOCR14	8/11/05 1115	<b>POCONO CREEK</b> (Stroudsburg) Approximately 50 yards upstream of its confluence with McMichael Creek. Lat. 40° 58' 49.40" Long. -75° 11' 44.70"
24	MCMICR21	8/11/05 1145	<b>MCMICHAEL CREEK</b> (Stroudsburg) Approximately 30 yards downstream of its confluence with Pocono Creek. Lat. 40° 58' 48.80" Long. -75° 11' 42.70"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
25	DRSARU01	8/12/05 0830	<b>DRY SAWMILL RUN</b> (Pocono) Approximately one half mile south of Sullivan Trail at its intersection with Brookdale Road. Lat. 41° 04' 14.10" Long. -75° 22' 11.80"
26	POCOCR20	8/12/05 0920	<b>POCONO CREEK</b> (Pocono) Approximately 15 yards downstream of its confluence with Wolf Swamp Run. Lat. 41° 03' 35.10" Long. -75° 22' 02.20"
27	POCOCR16	8/12/05 0945	<b>POCONO CREEK</b> (Pocono) Approximately 200 yards south of Mountain View Village, approximately 10 yards downstream of its confluence with Coolmoor Creek. Lat. 41° 03' 06.10" Long. -75° 20' 19.00"
28	POCOCR17	8/12/05 1030	<b>POCONO CREEK</b> (Pocono) Approximately 50 yards downstream of Sullivan Trail. Lat. 41° 03' 02.70" Long. -75° 19' 15.80"
29	POCOCR19	8/12/05 1130	<b>POCONO CREEK</b> (Pocono) At the Crossings Factory Stores overflow parking area. Lat. 41° 03' 00.80" Long. -75° 18' 49.70"
30	SCOTCR04	8/12/05 1145	<b>SCOTRUN CREEK</b> (Pocono) Approximately 100 yards upstream of bridge at Crossings Factory Stores overflow parking area. Lat. 41° 03' 17.30" Long. -75° 18' 54.50"



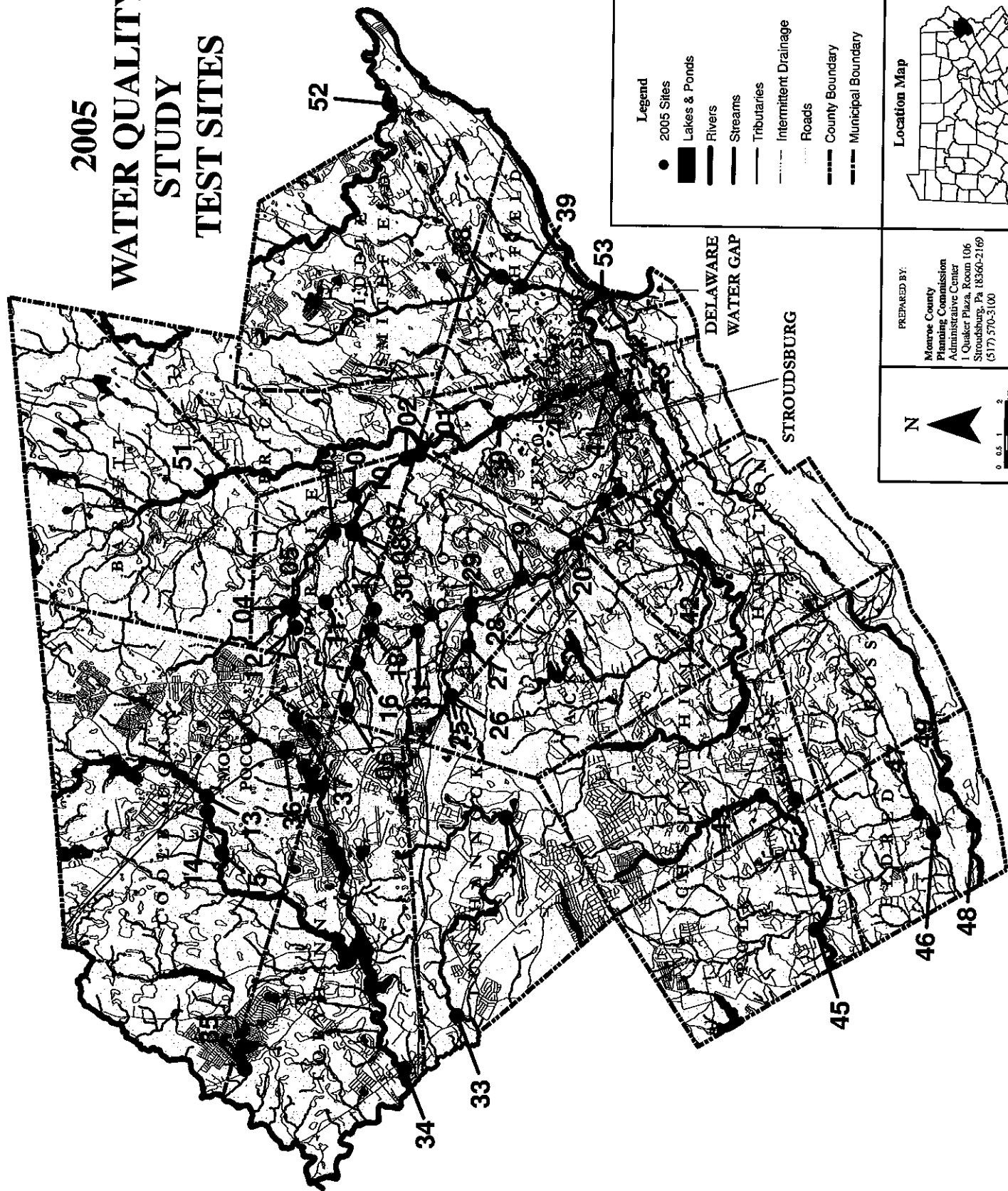
<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
31	SCOTCR05	8/12/05 1215	<b>SCOTRUN CREEK</b> (Pocono) Approximately 10 yards downstream of Brookdale Road. Lat. 41° 04' 27.46" Long. -75° 19' 46.30"
32	TUNKCR06	8/15/05 0900	<b>TUNKHANNOCK CREEK</b> (Tunkhannock) Approximately 1/2 mile upstream of the stone bridge on Hypsy Gap Road. Lat. 41° 02' 10.40" Long. -75° 26' 19.40"
33	TUNKCR03	8/15/05 1000	<b>TUNKHANNOCK CREEK</b> (Tunkhannock) Approximately 100 yards upstream of S.R. 115 bridge near its intersection with S.R. 903. Lat. 41° 03' 32.90" Long. -75° 33' 11.00"
34	TOBYCR14	8/15/05 1030	<b>TOBYHANNA CREEK</b> (Tobyhanna) Immediately upstream of the S.R. 115 bridge, downstream of the STP. Lat. 41° 04' 57.61" Long. -75° 35' 00.85"
35	TROUCR02	8/15/05 1130	<b>TROUT CREEK</b> (Tobyhanna) Approximately 75 yards downstream of Locust Ridge Road. Lat. 41° 09' 11.02" Long. -75° 34' 55.78"
36	HAWKRU01	8/15/05 1215	<b>HAWKEY RUN</b> (Coolbaugh) Approximately 25 yards downstream of bridge on Holiday Drive. Lat. 41° 08' 00.70" Long. -75° 23' 54.90"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
37	RED_RU03	8/15/05 1245	<b>RED RUN</b> (Coolbaugh) Approximately 100 yards upstream of Industrial Park Drive. Lat. 41° 07' 44.61" Long. -75° 22' 41.84"
38	MARSCR08	8/16/05 0830	<b>MARSHALLS CREEK</b> (Smithfield) Approximately 50 yards upstream of bridge on Route 209, south of Twin Falls Road. Lat. 41° 02' 04.90" Long. -75° 07' 27.00"
39	MARSCR09	8/16/05 0900	<b>MARSHALLS CREEK</b> (Smithfield) Approximately 25 yards upstream of bridge on County Bridge Road. Lat. 41° 01' 33.60" Long. -75° 07' 47.80"
40	SAMBCR10	8/16/05 0930	<b>SAMBO CREEK</b> (East Stroudsburg) Approximately 100 yards upstream of the mouth. Lat. 41° 00' 17.75" Long. -75° 11' 27.43"
41	MCMICR30	8/16/05 1030	<b>MCMICHAEL CREEK</b> (Stroudsburg) Approximately 300 yards downstream of Stroudsburg STP discharge. Lat. 40° 59' 16.63" Long. -75° 11' 06.75"
42	MCMICR28	8/16/05 1100	<b>MCMICHAEL CREEK</b> (Hamilton) Adjacent to County soccer fields, upstream of Appenzell Creek. Lat. 40° 56' 50.10" Long. -75° 17' 23.80"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
43	POHOCR07	8/17/05 0830	<b>POHOPOCO CREEK</b> (Chestnuthill) Immediately downstream of easterly bridge on Altomose Drive (left braid). Lat. 40° 55' 22.16" Long. -75° 25' 40.53"
44	WEIRCR01	8/17/05 0900	<b>WEIR CREEK</b> (Chestnuthill) Approximately 25 yards upstream of County Park Rd. Lat. 40° 54' 29.40" Long. -75° 25' 50.20"
45	POHOCR06	8/17/05 0930	<b>POHOPOCO CREEK</b> (Polk) At Berger Drive (where stream bends to the west near the road) at the County line. Lat. 40° 53' 58.80" Long. -75° 30' 22.20"
46	BUCKCR01	8/17/05 1020	<b>BUCKWHA CREEK</b> (Eldred) Approximately 200 yards downstream of stone bridge in Kunkletown. Lat. 40° 50' 50.15" Long. -75° 27' 03.63"
47	PRINRU01	8/17/05 1100	<b>PRINCESS RUN</b> (Eldred) Immediately downstream of Fiddletown Road. Lat. 40° 51' 13.03" Long. -75° 26' 22.29"
48	AQUACR09	8/17/05 1145	<b>AQUASHICOLA CREEK</b> (Eldred) Approximately 100 yards upstream of the bridge on Mountain Road, near County border. Lat. 40° 49' 45.70" Long. -75° 26' 49.30"

<u>Site Number</u>	<u>Site ID</u>	<u>Date Time Sampled</u>	<u>Description</u>
49	AQUACR10	8/17/05 1220	<b>AQUASHICOLA CREEK</b> (Eldred) At the Kunkletown Rod and Gun Club immediately downstream of bridge on the private drive. Lat. 40° 50' 28.58" Long. -75° 25' 24.34"
50	BRODCR12	8/18/05 0900	<b>BRODHEAD CREEK</b> (Stroud) Approximately 100 yards downstream of the bridge on S.R. 191, near its intersection with Route 447. Lat. 41° 02' 10.50" Long. -75° 12' 34.00"
51	BRODCR01	8/18/05 0945	<b>BRODHEAD CREEK</b> (Barrett) Approximately 50 yards upstream of Brinker's Bridge, at the intersection of S.R. 447 and Mill Creek Road. Lat. 41° 09' 52.30" Long. -75° 14' 25.30"
52	BUSHCR07	8/18/05 1100	<b>BUSHKILL CREEK</b> (Middle Smithfield) Approximately 100 yards downstream of Middle Smithfield Township STP. DWGNRA boundary control point. Lat. 41° 04' 57.60" Long. -75° 01' 21.00"
53	BRODCR13	8/18/05 1200	<b>BRODHEAD CREEK</b> (Smithfield) Approximately 200 yards upstream of its mouth where it meets the Delaware River. DWGNRA boundary control point. Lat. 40° 59' 26.10" Long. -75° 08' 06.10"

# 2005 WATER QUALITY STUDY TEST SITES



SITE NUMBER	SITE ID
01	PARACR03
02	BUTZR01
03	CRCPA01
04	DEHOCR04
05	PARACR04
06	INDIRU01
07	FOHIRU01
08	SWIFCR06
09	SWIFCR02
10	PARACR01
11	FOHIRU09
12	FOHIRU04
13	TOBYCR17
14	TOBYCR18
15	TOBYCR01
16	SWIFCR07
17	SWIFCR05
18	SWIFCR03
19	BULGRU01
20	POCOCR15
21	POCOCR18
22	POCOCR22
23	POCOCR14
24	MCMICR21
25	DRSARU01
26	POCOCR20
27	POCOCR16
28	POCOCR17
29	POCOCR19
30	SCOTCR04
31	SCOTCR05
32	TUNKCR06
33	TUNKCR03
34	TOBYCR14
35	TROUCR02
36	HAWKRU01
37	RED RU03
38	MARSCR08
39	MARSCR09
40	SAMCR10
41	MCMICR30
42	MCMICR28
43	POHOCR07
44	WEICR01
45	POHOCR06
46	BUCKCR01
47	FRINRU01
48	AQUACR09
49	AQUACR10
50	BRODCR12
51	BRODCR01
52	BUSHCR07
53	BRODCR13

## METHODOLOGY

In order to establish consistency, the same parameters that have been used in previous years were again utilized in 2004.

As in the past, several parameters were tested on site with field equipment as follows:

Volume Flow	Flow Mate, Global Flow Probe
Temperature	HACH Model Sension 6 Dissolved Oxygen Meter
D.O.	HACH Model Sension 6 Dissolved Oxygen Meter
pH	Oakton pH pen
Conductivity	Oakton Conductivity / TDS / °C / °F Data Meter - CON 410 Series
T.D.S.	Oakton Conductivity / TDS / °C / °F Data Meter - CON 410 Series

The following is a list of test parameter methodologies and detection limits which were utilized by Prosser Laboratories in the analysis of the stream samples.

<u>TEST</u>	<u>METHOD</u>	<u>REPORT LIMIT</u>
pH	SM 4500HB	
Alkalinity	SM 2320B	2 mg/l
Total Hardness	SM 2340C	2 mg/l
Nitrate + Nitrite as N	SM 4500F AUTO	0.2 mg/l
Nitrate-N	SM 4500F AUTO	0.2 mg/l
Nitrite-N	SM 4500B SPEC.	0.005 mg/l
Ammonia-N	SM19 4500NH3 G	0.20 mg/l
Total Phosphorous	SM 4500 - PF	0.1 mg/l
Chloride	EPA 325.3	2 mg/l
Acidity	SM18 2310B	2 mg/l
Total Suspended Solids	SM 2540D	1.00 mg/l
Fecal Coliform	SM 18-9222D	-----
Iron	EPA 200.7	0.002 mg/l
Nickel, Dissolved	EPA 200.7	0.002 mg/l
Copper, Dissolved	EPA 200.7	0.002 mg/l
Cadmium, Dissolved	EPA 200.7	0.0005 mg/l
Arsenic, Dissolved	EPA 200.7	0.005 mg/l
Lead, Dissolved	EPA 200.7	0.002 mg/l
Zinc, Dissolved	EPA 200.7	0.002 mg/l

The benthic macroinvertebrates were collected by a standardized method. At each site two generalized kick samples were taken using a 1meter x 1meter seine. One kick is taken from a riffle in the stream and one kick is taken from a run. The entire sample is combined and stabilized immediately with an alcohol solution. The sample is then taken to the Monroe County Conservation District office where it is sub-sampled. A plastic square form of four inches by four inches is placed in the pan to provide a random sub-sample. A minimum sub-sample of 100 organisms is desired for a valid analysis. A professional entomologist then identified the macroinvertebrates contained in each subsample. The

macroinvertebrates are picked without the aid of magnification. Several samples are picked at random for a debris sample. The specifics of the macroinvertebrate analysis as it relates to the RBPs are discussed in Appendix A of this report.

Artificial substrate samplers are being used to sample macroinvertebrates at the site located on the Tunkhannock Creek upstream of the bridge on Hypsy Gap Road. This method of sampling was initiated due to the difficulty of sampling streams found in wetlands. Kick samples and samples from the artificial substrate samplers were collected for a period of three years. When the results from the kick sample data were compared to the artificial substrate samplers from 1997 through 1999, the same trends were noted. The macroinvertebrate communities had yielded scores that were nearly identical for three years indicating that the use of artificial substrate samplers in place of kick samples in wetland areas is viable.

The artificial substrate samplers employed were composed of eight 3" x 3" plates, spaced along an 8" eye bolt. The plates were separated using standard one inch round washers. The first group of four plates was separated using a single washer, while the second group of four plates was separated using two washers. The total surface area of the sampler was 929 cm<sup>2</sup>. Five samplers were placed at the sampling site approximately six weeks in advance of the collection date.

Debris samples were conducted on approximately ten percent of the samples. The debris analysis is a tool for determining the percent of macroinvertebrates which may be missed during the initial analysis, a form of quality assurance and quality control (qa/qc). For the debris sample analysis a lighted magnifying lens was employed (this may contribute to a larger than expected percentage of missed individuals).

Pebble Counts were conducted on the cross section of each stream (wetted area), generally in close proximity to the individuals conducting the flow study. The individual measuring the particles would take a step reach down without looking and measure the first particle touched along its indeterminate axis. The particles were measured with an Al-Sci Field Sieve/Gravelometer and sand gauge. This procedure was repeated, sometimes making several trips back and forth across the stream in a straight line until 100 particles were measured. The percentages are calculated and graphed in the office using a Microsoft Excel spread sheet.

The flow measurements were conducted by stretching a tape measure across the stream to measure the width of the stream (wetted area). The stream is then divided into sections allowing for a minimum of ten measurement points. The average velocity is read at each of the measurement points. If the measurement points are less than two feet in depth, one reading is taken at six tenths of the depth from the bottom. If the measurement point is greater than two feet in depth, two readings are taken, one at two tenths of the depth from the bottom and one at eight tenths of the depth from the bottom. When measuring the average velocity, if no flow registers on the meter it is recorded as a zero. The cross sectional area is calculated in the office using the computer program GraphPad. The average velocity measurements are averaged and multiplied by the cross sectional area to determine the volume of flow for each stream.

During the field sampling, the water samples collected for laboratory analysis were stored in a cooler with both ice packs and ice cubes in order to stabilize the samples and then transported to Prosser Laboratories for testing.

In order to maintain consistency, two weeks in the middle of August were selected for sampling as a result of long-term flow data analysis of Monroe County streams. The end of August and the beginning of September tend to be the period of lowest flow and of optimum biological activity. Low flow testing was chosen because streams are most vulnerable to pollution at this time. It should be noted that the weather patterns that occurred during the 2004 study contributed to flows which were generally higher than expected for this time of year.

The Planning Commission Staff correlated the final data.



# **Appendix A:**

## **Benthic Macroinvertebrates**

## **BENTHIC MACROINVERTEBRATES**

Aquatic macroinvertebrates are animals that are large enough to be seen by the unaided eye and live at least part of their life cycles within or upon available substrates in a body of water or water transport system. These include insects such as mayflies, annelids, mollusks, flatworms, roundworms, and crustaceans. The samples collected allow for a detailed analysis of the aquatic community. A brief explanation of these factors is offered to enable the reader to understand the importance of measuring the relative stability of the aquatic community.

The sampling technique is a standard kick sample format using a 500 micron mesh size, 1 meter x 1 meter seine net. Normally one sample (one square meter of substrate) is taken from a riffle in the stream and one sample (one square meter of substrate) is taken from a run. The entire sample is taken to the Monroe County Conservation District office where it is subsampled. A minimum subsample of 100 organisms is desired for a valid analysis.

The following are the metrics used for the macroinvertebrate analysis. Metrics are the various counts, indexes, and ratios computed from the results of the subsamples as described above. Different metrics convey different types of information about the macroinvertebrate community. For example, taxa richness is an index of diversity and the Hilsenhoff Biotic Index measures pollution tolerance. By using a set of metrics that measures multiple aspects of the macroinvertebrate community, a complete picture of a community can be obtained.

Total Individuals is the actual number of macroinvertebrates collected.

Total Taxa (Species richness) is a measure of the variety of taxa (total number of species) present. This generally increases with increasing water quality or habitat. In some situations, organic enrichment may also result in an increase in the number of taxa.

Percent Contribution of Dominant Taxa gives an indication of the balance in the community. A community dominated by relatively few species would indicate environmental stress. An even distribution of all taxa (preferably sensitive species) is more desirable.

Percent Noninsects gives an indication of the balance in the community. Noninsects are generally tolerant species. A community dominated by noninsects would be an indication of environmental stress. An even distribution of all taxa (preferably sensitive species) is more desirable.

Modified Hilsenhoff Biotic Index (HBI) is a ranking based on pollution tolerance to organic sources values. These values range from 0-10 increasing as water quality decreases. The Biotic Index is an average of tolerance values for all individuals collected from a site.

The following demonstrates the range for Biotic Index:

0.00-3.75	Excellent
3.76-4.25	Very Good
4.26-5.00	Good
5.01-5.75	Fair
5.76-6.50	Fairly Poor
6.51-7.25	Poor
7.26-10.0	Very Poor

EPT Index is a measure of the total number of distinct taxa within the orders of Ephemeroptera, Plecoptera and Trichoptera. This summarizes the taxa richness within the insect orders that are generally sensitive to pollution. The EPT Index generally increases with increasing water quality.

Percent Intolerant Taxa gives an indication of the balance in the community. Intolerant organisms are usually not found associated with organic contaminants and are generally intolerant of even moderate reductions in dissolved oxygen. Intolerant organisms are indicators of clean water only.

The Ratio of Shredders to the Total Number of Insects uses the relative abundance of shredders as an indication of the dominant food or energy source in a small watershed. Shredders are insects that shred coarse particulate detritus for feeding. Shredders represent a distinct functional feeding group that is found predominantly in watersheds less than 10 square miles in size where the primary energy source in the stream is derived from leaf litter and similar detritus entering the watercourse. Shredders should become less abundant as the stream width increases and the canopy cover opens and photosynthesis becomes the primary energy source in the stream.

### **Scoring Schemes**

Scoring schemes have been completed for the entire County. The EPA conducted the majority of the statistical analysis needed to determine the metrics that are used for the Pocono Plateau and Low Pocono subcoregions. The metrics were selected because of their accuracy in detecting impairment. The County completed the work for the remaining subcoregions in the County, but without the help of the EPA this work would have been much more difficult.

A simple process was used to develop the reference conditions for the different stream classes. Within each stream class, minimally impaired reference sites were sampled. Descriptive statistics for each metric were calculated from a group of similar candidate reference sites. Only the candidate reference sites with optimal habitat and intact benthic macroinvertebrate communities were included in the reference condition. Test sites, or sites thought to be impaired, were not used in the development of reference conditions. Thresholds for optimal, slightly to moderately impaired and severely impaired categories were developed for each metric. The data from each metric was compiled and ranked. If a metric increases with impact (HBI for example), the 75<sup>th</sup> percentile of the reference condition is used as the threshold for the optimal category. The remaining range between that value and the maximum value obtainable for that metric was halved to provide two more ranges for scoring the slightly to moderately impaired and severely impaired categories. If the metric value decreases with impact (taxa richness for example), the 25<sup>th</sup> percentile of the reference condition is used as the threshold for the

optimal category. The remaining range between that value and the minimum value was halved to provide two more ranges for scoring the slightly to moderately impaired and severely impaired categories. For some metrics, this may result in somewhat insensitive scoring. For percent noninsects, for example, the maximum possible is 100%. However, 25% was the maximum encountered in the severely impacted sites for the Pocono Plateau / Glide Pool subcoregion. The scoring was adjusted to reflect the values of that metric generally encountered in impacted streams for this subcoregion, in order to make the scoring for that metric more sensitive.

All candidate reference sites were scored using the scoring scheme for that stream classification. These scores were then ranked. The lower 25<sup>th</sup> percentile was used to define the lower range of the optimal category. The remaining range between that value and the minimum possible optimal score was bisected to define two more ranges for the slightly to moderately impaired and severely impaired categories for the total scores.

The County identified all organisms collected to the family level and all the calculations were performed using family level identifications. The family level of identification was chosen to make data sharing both easier and faster (both the EPA and DEP identify their macroinvertebrate samples to the family level). Identification of macroinvertebrates to the family is easier to perform and yields results that are suitable for our purposes. Another reason for choosing this level of identification was the interest of local watershed groups in performing macroinvertebrate sampling. For these groups genus level identification would be too difficult and time consuming. In order for the County to accept their data, however, the identifier would have to pass a quality assurance program established by the County.

The following are tables for the scoring schemes.

## Pocono Plateau, Riffle / Run < 10 square miles

Samples from Keiper Run, Beaver Creek, Cross Keys Run, Frame Cabin Run and Tripup Run were used to develop the reference condition.

### **Resulting scoring scheme for the reference condition for the Pocono Plateau, Riffle / Run < 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	>= 15	14 - 8	7 - 0
EPT Taxa	>= 8	7 - 4	3 - 0
HBI	<= 5.4	5.5 - 7.7	7.8 - 10
% Intolerant Taxa	>= 35.3	35.2 - 17.7	17.6 - 0
% Noninsect	<= 2.0	2.1 - 25.0	25.1 - 100
Shredders / Total	>= 0.02	0.019 - 0.01	0.009 - 0

The reference sites were all scored using this scoring scheme. The lower 25th percentile of the reference site scores represents the lower threshold for the "optimal" category. The 25th percentile of the reference scores is 26. The range 25 - 16 will be the slightly to moderately impaired category, and any site with a total score of less than 16 will be considered severely impaired.

**Pocono Plateau, Riffle / Run > 10 square miles**

Samples collected from Tunkhannock Creek and Tobyhanna Creek were used to develop a reference condition for the larger streams on the plateau. Descriptive statistics for the metrics at these two sites were calculated and the resulting scoring scheme was developed as described previously. The scoring scheme for the larger streams is shown in the following table.

**Resulting scoring scheme for the reference condition  
for the Pocono Plateau, Riffle / Run > 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	> = 15	14 - 8	7 - 0
EPT Taxa	> = 8	7 - 4	3 - 0
HBI	< = 5.7	5.8 - 7.9	8.0 - 10
% Intolerant Taxa	> = 39.3	39.2 - 19.7	19.6 - 0
% Noninsect	< = 3.6	3.7 - 25.0	25.1 - 100
Shredders / Total	> = 0.003	0.0029 - 0.0015	0.0014 - 0

The reference sites were all scored using this scoring scheme. The 25<sup>th</sup> percentile of the reference scores is 26. The range 25 - 16 will be the slightly to moderately impaired category, and any site with a total score of less than 16 will be considered severely impaired.

## Pocono Plateau, Glide / Pool

Samples collected from Tunkhannock Creek were used to develop a reference condition for the glide pool streams found in the Long Pond area. Descriptive statistics for the metrics at these sites were calculated and the resulting scoring scheme was developed as described previously. The scoring scheme for the glide pool streams is shown in the following table.

**Resulting scoring scheme for the reference condition  
for the Pocono Plateau, Glide / Pool**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	$\geq 15$	14 - 8	7 - 0
EPT Taxa	$\geq 6$	5 - 3	2 - 0
HBI	$\leq 5.5$	5.6 - 7.8	7.9 - 10
% Intolerant Taxa	$\geq 26.7$	26.6 - 13.4	13.3 - 0
% Noninsect	0	$>0 - 25.0$	25.1
Shredders / Total	$\geq 0.01$	0.009 - 0.005	0.0049 - 0

The reference sites were all scored using this scoring scheme. The lower 25th percentile of the reference site scores represents the lower threshold for the "optimal" category. The 25th percentile of the reference scores is 28. The range 27 - 17 will be the slightly to moderately impaired category, and any site with a total score of less than 17 will be considered severely impaired.

## **Low Pocono, Riffle / Run < 10 square miles**

Samples from Spruce Cabin Run and Buck Hill, Rattlesnake, Mill, Poplar Run, Devils Hole, Fall, Poplar and Swiftwater Creeks were used in developing a scoring scheme for this region. Descriptive statistics for the metrics at these sites were calculated, and the resulting scoring scheme was developed as described earlier. The main difference between the metrics from the Pocono Plateau and Low Pocono subcoregions is the inclusion of the percent dominant family for the Low Pocono.

### **Resulting scoring scheme for the reference condition for the Low Pocono, Riffle / Run < 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	>= 16	15 - 8	7 - 0
EPT Taxa	>= 11	10 - 6	5 - 0
HBI	<= 4.5	4.6 - 7.3	7.4 - 10
% Dominant Family	<= 42.6	42.7 - 71.3	71.4 - 100
% Intolerant Taxa	>= 55.6	55.5 - 27.8	27.7 - 0
% Noninsect	<= 0	0 - 25.0	25.1 - 100
Shredders / Total	>= 0.11	0.10 - 0.06	0.05 - 0

The reference sites were all scored using this scoring scheme. The 25th percentile of the reference sites scores is 31. The range 30 - 19 will be the slightly to moderately impaired category, and any site with a total score less than 19 will be considered severely impaired.



## Low Pocono, Riffle / Run > 10 square miles

Samples collected from the Bushkill, McMichael, Brodhead, Paradise, and Pocono Creeks were calculated and the resulting scoring scheme was developed.

### **Resulting scoring scheme for the reference condition for the Low Pocono, Riffle / Run > 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	> = 17	16 - 9	8 - 0
EPT Taxa	> = 10	9 - 5	4 - 0
HBI	< = 5.6	5.7 - 7.8	7.9 - 10
% Dominant Family	< = 46.3	46.4 - 73.2	73.3 - 100
% Intolerant Taxa	> = 35.7	35.6 - 17.9	17.8 - 0
% Noninsect	< = 9.6	9.7 - 25.0	25.1 - 100
Shredders / Total	> = 0.03	0.029 - 0.015	0.014 - 0

The reference sites were all scored using this scoring scheme. The 25th percentile of the reference scores is 29. The range 28 - 18 will be the slightly to moderately impaired category, and any site with a total score of less than 18 will be considered severely impaired.

## Northern Shale Valleys and Slopes, Riffle / Run < 10 square miles

Samples collected from the Princess, Ross Common, and Cherry Creeks were calculated and the resulting scoring scheme was developed. This scoring scheme follows the work that has been completed for the Low Pocono subcoregions in that it also includes the percent dominant family metric.

### **Resulting scoring scheme for the reference condition for the Northern Shale Valleys and Slopes, Riffle / Run < 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	>= 18	17 - 9	8 - 0
EPT Taxa	>= 9	8 - 4	3 - 0
HBI	<= 5.0	5.1 - 7.5	7.6 - 10
% Dominant Family	<= 34.9	35.0 - 71.4	71.5 - 100
% Intolerant Taxa	>= 26.1	26.2 - 13.0	12.9 - 0
% Noninsect	<= 5.6	5.7 - 25.0	25.1 - 100
Shredders / Total	>= 0.14	0.139 - 0.070	0.069 - 0

The reference sites were all scored using this scoring scheme. The 25<sup>th</sup> percentile of the reference scores is 31. The range 30 - 18 will be the slightly to moderately impaired category, and any site with a total score of less than 18 will be considered severely impaired. It should be noted that only six sites were used in creating this scoring scheme. It will be adjusted after further studies have provided more data.

**Northern Shale Valleys and Slopes, Riffle / Run > 10 square miles**

Samples collected from the McMichael, Pohopoco, Aquashicola, Cherry, and Buckwha Creeks were calculated and the resulting scoring scheme was developed.

**Resulting scoring scheme for the reference condition  
for the Northern Shale Valleys and Slopes, Riffle / Run > 10 square miles**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	>= 19	18 - 10	9 - 0
EPT Taxa	>= 11	10 - 6	5 - 0
HBI	<= 5.1	5.2 - 7.6	7.7 - 10
% Dominant Family	<= 42.6	42.7 - 71.4	71.5 - 100
% Intolerant Taxa	>= 28.6	28.5 - 14.3	14.2 - 0
% Noninsect	<= 3.9	4.0 - 25.0	25.1 - 100
Shredders / Total	>= 0.02	0.019 - 0.009	0.008 - 0

The reference sites were all scored using this scoring scheme. The 25th percentile of the reference scores is 31. The range 30 - 18 will be the slightly to moderately impaired category, and any site with a total score of less than 18 will be considered severely impaired.

## Northern Sandstone Ridges, Riffle / Run

Samples collected from the Poplar, Caledonia and Ross Common Creeks were calculated and the resulting scoring scheme was developed.

### **Resulting scoring scheme for the reference condition for the Northern Sandstone Ridges, Riffle / Run**

Score Assigned →→→→	5 (Optimal)	3 (slightly to moderately impaired)	1 (Severely impaired)
Metric			
Total Taxa	$\geq 16$	15 - 8	7 - 0
EPT Taxa	$\geq 10$	9 - 5	4 - 0
HBI	$\leq 3.9$	4.0 - 7.0	7.1 - 10
% Dominant Family	$\leq 24.1$	24.2 - 62.1	62.2 - 100
% Intolerant Taxa	$\geq 37.5$	37.4 - 18.8	18.7 - 0
% Noninsect	$\leq 2.2$	2.3 - 51.2	51.3 - 100
Shredders / Total	$\geq 0.09$	0.089 - 0.045	0.044 - 0

The reference sites were all scored using this scoring scheme. The 25th percentile of the reference scores is 33. The range 32 - 17 will be the slightly to moderately impaired category, and any site with a total score of less than 16 will be considered severely impaired.

## MACROINVERTEBRATE SUMMARY

The following tables show results for the Pocono Plateau, Low Pocono and Northern Shale Valleys and Slopes streams using the EPA/County scoring schemes.

### Scores for samples for the Pocono Plateau, Riffle / Run < 10 square miles

Stream Name	Sample Number	Type of Site	Score	Condition
Hawkey Run	HAWKRU01	Monitor	24	Slightly Impaired
Red Run	REDRU03	Monitor	22	Slightly Impaired

The range 30 - 26 is considered optimal. The range 25 - 16 is the slightly to moderately impaired category, and any site with a total score of less than 16 is considered severely impaired.

### Scores for samples for the Pocono Plateau, Riffle / Run > 10 square miles

Stream Name	Sample Number	Type of Site	Score	Condition
Tobyhanna Creek	TOBYCR01	Reference	28	Optimal
Tobyhanna Creek	TOBYCR14	Monitor	29	Optimal
Tobyhanna Creek	TOBYCR17	New	20	Slightly Impaired
Tobyhanna Creek	TOBYCR18	New	26	Optimal
Trout Creek	TROUCR02	Reference	24	Slightly Impaired
Tunkhannock Creek	TUNKCR03	Reference	28	Optimal

The range 30 - 26 is considered optimal. The range 25 - 16 is the slightly to moderately impaired category, and any site with a total score of less than 16 is considered severely impaired.

### Scores for samples for the Pocono Plateau, Glide Pool

Stream Name	Sample Number	Type of Site	Score	Condition
Tunkhannock Creek	TUNKCR06	Reference	24	Slightly Impaired

The range 30 - 29 is considered optimal. The range 28 - 17 is the slightly to moderately impaired category, and any site with a total score of less than 17 is considered severely impaired.

**Scores for samples for the Low Pocono,  
Riffle / Run < 10 square miles**

Stream Name	Sample Number	Type of Site	Score	Condition
Bulgers Run	BULGRU01	New	23	Moderately Impaired
Butz Run	BUTZRU01	Monitor	23	Moderately Impaired
Cranberry Creek (Paradise Twp)	CRCRPA01	Monitor	29	Slightly Impaired
Devils Hole Creek	DEHOCR04	Monitor	33	Optimal
Dry Sawmill Run	DRSARU01	Monitor	19	Moderately Impaired
Forest Hills Run	FOHIRU01	Monitor	29	Slightly Impaired
Forest Hills Run	FOHIRU04	Monitor	21	Moderately Impaired
Forest Hills Run	FOHIRU09	Monitor	21	Moderately Impaired
Indian Run	INDIRU01	Monitor	33	Optimal
Scotrun Creek	SCOTCR04	Monitor	23	Moderately Impaired
Scotrun Creek	SCOTCR05	New	17	Severely Impaired
Swiftwater Creek	SWIFCR02	Monitor	27	Slightly Impaired
Swiftwater Creek	SWIFCR03	Monitor	27	Slightly Impaired
Swiftwater Creek	SWIFCR05	Monitor	33	Optimal
Swiftwater Creek	SWIFCR06	Monitor	25	Slightly Impaired
Swiftwater Creek	SWIFCR07	Monitor	29	Slightly Impaired

The range 35 - 31 is considered optimal. The range 30 - 16 is the slightly to moderately impaired category, and any site with a total score of less than 16 is considered severely impaired.

**Scores for samples for the Low Pocono,  
Riffle / Run > 10 square miles**

Stream Name	Sample Number	Type of Site	Score	Condition
Brodhead Creek	BRODCR01	Reference	33	Optimal
Brodhead Creek	BRODCR12	Monitor	33	Optimal
Bushkill Creek	BUSHCR07	Monitor / Reference	31	Optimal
Paradise Creek	PARACR01	Monitor	33	Optimal
Paradise Creek	PARACR03	Monitor	35	Optimal
Paradise Creek	PARACR04	Monitor	33	Optimal
Pocono Creek	POCOCR15	Monitor	33	Optimal
Pocono Creek	POCOCR16	Monitor	27	Slightly Impaired
Pocono Creek	POCOCR17	Monitor	31	Optimal
Pocono Creek	POCOCR19	Monitor	31	Optimal
Pocono Creek	POCOCR20	Monitor	35	Optimal

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.

**Scores for samples for the Northern Shale Valleys and Slopes,  
Riffle / Run < 10 square miles**

Stream Name	Sample Number	Type of Site	Score	Condition
Princess Run	PRINRU01	Monitor	25	Slightly Impaired
Sambo Creek	SAMBCR10	Monitor	25	Slightly Impaired
Weir Creek	WEIRCR01	Monitor	23	Moderately Impaired

The range 35 - 31 is considered optimal. The range 30 - 18 is the slightly to moderately impaired category, and any site with a total score of less than 18 is considered severely impaired.

**Scores for samples for the Northern Shale Valleys and Slopes,  
Riffle / Run > 10 square miles**

Stream Name	Sample Number	Type of Site	Score	Condition
Aquashicola Creek	AQUACR09	Monitor	35	Optimal
Aquashicola Creek	AQUACR10	Monitor	33	Optimal
Brodhead Creek	BRODCR13	Monitor	19	Moderately Impaired
Buckwha Creek	BUCKCR10	Monitor	31	Optimal
Marshalls Creek	MARSCR08	Monitor	33	Optimal
Marshalls Creek	MARSCR09A	Monitor	25	Slightly Impaired
Marshalls Creek	MARSCR09B	Monitor	25	Slightly Impaired
McMichaels Creek	MCMICR21	Monitor / Reference	23	Moderately Impaired
McMichael Creek	MCMICR28	Monitor	25	Slightly Impaired
McMichael Creek	MCMICR30	Monitor	21	Moderately Impaired
Pocono Creek	POCOCR14	Monitor / Reference	29	Slightly Impaired
Pocono Creek	POCOCR18	Monitor	28	Slightly Impaired
Pocono Creek	POCOCR22	New	35	Optimal
Pohopoco Creek	POHOOCR06	Monitor	31	Optimal
Pohopoco Creek	POHOOCR07	New	27	Slightly Impaired

The range 35 - 31 is considered optimal. The range 30 - 18 is the slightly to moderately impaired category, and any site with a total score of less than 18 is considered severely impaired.



The following tables compare trending results of the EPA/County scoring schemes for repeat sites (1995 through 2003).

Site #	Site Name	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
AQUACR09	Aquashicola Creek	35	29	27	29	33	31	33	29	35	35
AQUACR10	Aquashicola Creek	33	33								
BRODCR01	Brodhead Creek	33	35	33/31	35	35	33	35	35	33	35
BRODCR12	Brodhead Creek	33	29	29	29	29	29	29	29	27	29
BRODCR13	Brodhead Creek	19	---	23/25	29	27	21	29	27	27	11
BUCKCR01	Buckwha Creek	31									
BULGRU01	Bulgurs Run	23									
BUSHCR07	Bushkill Creek	31	27	29	29	31	27	29	27	33	29
BUTZRU01	Butz Run	23	29	23							
	Cranberry Creek										
CRCRPA01	(Paradise)	29	29								
DEHOCR04	Devils Hole Creek	33	31	31							
DRSARU01	Dry Sawmill Run	19	21	27	31	21	23			29	
FOHIRU01	Forest Hills Run	29	29	25							
FOHIRU04	Forest Hills Run	21	25	19	25	29	25	27	27	23	31
FOHIRU09	Forest Hills Run	21	15	17							
HAWKRU01	Hawkey Run	24						28			
INDIRU01	Indian Run	33		31					31	31	
MARSCR08	Marshalls Creek	33	27	23	23	27	25	19	27	19	23
MARSCR09	Marshalls Creek	25/25	25	23	31	29	25	31	25	21	25
MCMICR21	McMichael Creek	23	25	25	31	33	25	29	27	25	31
MCMICR28	McMichaels Creek	25	21	23							
MCMICR30	McMichaels Creek	21	27								
PARACR01	Paradise Creek	33	29	29							
PARACR03	Paradise Creek	35	33	31							
PARACR04	Paradise Creek	33	33	31							
POCOCR14	Pocono Creek	29	23	27	29	25	21	29			

Site #	Site Name	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
POCOCR15	Pocono Creek	33	35	29	31	35	31	27			
POCOCR16	Pocono Creek	27	27	25	31	23	29	29			
POCOCR17	Pocono Creek	31	21	23	33	29	33				
POCOCR18	Pocono Creek	28	33	33	31	31	27				
POCOCR19	Pocono Creek	31	31	27	35	33					
POCOCR20	Pocono Creek	35	27	23	29	27					
POCOCR22	Pocono Creek	35	33								
POHOOCR06	Pohopoco Creek	31	33	35	33	31	33	33	33	31	33
POHOOCR07	Pohopoco Creek	27									
PRINRU01	Princess Run	25									
REDRU03	Red Run	22	24	22	24						
SAMBCR10	Sambo Creek	25	31								
SCOTCR04	Scotrun Creek	23	27	27	31	29					
SCOTCR05	Scotrun Creek	17									
SWIFCR02	Swiftwater Creek	27	25	27							
SWIFCR03	Swiftwater Creek	27	29	29	25	29	29	17	27	19	27
SWIFCR05	Swiftwater Creek	33	33	23	25	29	27	25	29	21	25
SWIFCR06	Swiftwater Creek	25	21	23							
SWIFCR07	Swiftwater Creek	29	29	25	29	33					
TOBYCR01	Tobyhanna Creek	28	22	26	26	22	24	20	14	18	26
TOBYCR14	Tobyhanna Creek	29							26		
TOBYCR17	Tobyhanna Creek	20									
TOBYCR18	Tobyhanna Creek	26									
TROUCR02	Trout Creek	24									
TUNKCR03	Tunkhannock Creek		28	28	30	28	26	26	28	30	30
TUNKCR06	Tunkhannock Creek		22	24	20	28	24	20	18	18	
WEIRCR01	Weir Creek	23				21	19				

**Debris Sample Analysis**

SITES	PARACR01	PARACR01 - DS	POCOCR15	POCOCR15 - DS	SCOTCR04	SCOTCR04 - DS
Number of Taxa	23	23	22	22	26	27
EPT Index	12	12	12	12	13	13
% Intolerant Taxa (0-2 TV)	34.8	34.8	27.3	27.3	23.1	22.2
Shredders/Total	0.049	0.047	0.045	0.044	0.050	0.048

SITES	SAMBCR10	SAMBCR10 - DS	BRODCR12	BRODCR12 - DS
Number of Taxa	15	16	22	22
EPT Index	8	8	16	16
% Intolerant Taxa (0-2 TV)	13.3	12.5	40.9	40.9
Shredders/Total	0.013	0.015	0.024	0.023

The Debris Sample (DS) column shows the composite of the original count + the debris sample count.

PARACR01 was the first debris sample site. In the composite sample, PARACR01 - DS, 3.25% of the total number of organisms were found in the debris analysis. Two taxa dominated the debris sample for this site, chironomidae (23.1%) and heptagenidae (19.8%).

POCOCR15 was the second debris sample site. In the composite sample for this site, POCOCR15 - DS, 1.48% of the organisms were found in the debris sample. The debris sample for this site was comprised predominantly of chironomidae (43.0%).

SCOTCR04 was the third site tested to include a debris sample analysis. The debris sample comprised approximately 4.39% of the composite sample at this site. The debris sample for this site was comprised predominantly of chironomidae (31.1%).

SAMBCR10 was the fourth site tested to include a debris sample analysis. The debris sample comprised approximately 4.82% of the composite sample at this site. The number of individuals identified in this debris sample was spread through several taxa.

The final site chosen for a debris sample was BRODCR12. At this site, the debris sample comprised 4.04% of the composite sample. The dominant taxa at this site were heptagenidae (24.7%) and chironomidae (18.7%).

For the methods of sampling involved (naked eye initially and 2x magnifying lens for the debris sample) the percentages shown are within acceptable limits. Many of the individuals identified in the debris sample analysis were found primarily because of the use of the magnifying lens.

In future studies work will continue to refine this method of quality assurance and control.

MONROE COUNTY WATER QUALITY STUDY			SITE ID. PARACR03		
Insecta		Philopotamidae	23	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	31	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	8	Poduridae	
Ephemerellidae	3	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	27	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	34	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	2
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	5	Glossosomatidae		Platyhelminthes	
Tricorythidae	2	Hydroptilidae	7	Turbellaria	
Odonata		Rhyacophilidae	1	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halplidae		Corbiculidae	
Calopterygidae		Noteridae		Castropoda	
Coenagrionidae		Elmidae	9	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	1	Psephenidae	2	Limnaeidae	
Leuctridae	11	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	10	Cammaridae	
Perlidae	3	Sialidae		Talitridae	
Perlodidae	2	Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	1	Arachnidia	
Corixidae		Tipulidae	6	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	28		
Trichoptera		Culicidae			
Hydropsychidae	37	Muscidae			

MONROE COUNTY WATER QUALITY STUDY				SITE ID. BUTZRU01	
Insecta		Philopotamidae	5	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae		Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae	4	Brachycentridae	3	Poduridae	
Ephemerellidae	2	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		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	2	Ancylidae	1
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	7	Limnaeidae	
Leuctridae	4	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	4
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	32		
Trichoptera		Culicidae			
Hydropsychidae	19	Muscidae			

MONROE COUNTY WATER QUALITY STUDY				SITE ID. CRCRPA01	
Insecta		Philopotamidae	2	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	10	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	5	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae	1	Nematomorpha	
Leptophlebiidae	8	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae	8	Oligochaeta	
Oligoneuriidae	2	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae	2	Hydroptilidae	3	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae	3	Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	2	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	3	Psephenidae	19	Limnaeidae	
Leuctridae	24	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	3	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	5	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	38		
Trichoptera		Culicidae			
Hydropsychidae	11	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. DEHOCR04	
Insecta		Philopotamidae	29	Simuliidae
Ephemeroptera		Polycentropodidae	6	Tabanidae
Baetidae	53	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	1	Poduridae
Ephemerellidae		Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae		Nematoda
Heptageniidae	13	Leptoceridae		Nematomorpha
Leptophlebiidae	2	Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae		Phryganeidae		Lumbriculida
Polymitarcyidae		Sericostomatidae		Lumbriculidae
Potamanthidae		Uenoidae	1	Tubificida
Siphonuridae		Glossosomatidae		Platyhelminthes
Tricorythidae		Hydroptilidae		Turbellaria
Odonata		Rhyacophilidae	1	Planariidae
Aeshnidae		Lepidoptera		Mollusca
Cordulegastridae		Pyralidae		Bivalva
Corduliidae		Coleoptera		Unionidae
Gomphidae		Dytiscidae		Sphaeriidae
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Halplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae	1	Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae	14	Psephenidae		Limnaeidae
Leuctridae	2	Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae	3	Corydalidae		Gammaridae
Perlidae		Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae	3	Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	4	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	36	
Trichoptera		Culicidae		
Hydropsychidae	26	Muscidae		



MONROE COUNTY WATER QUALITY STUDY			SITE ID. PARACR04		
Insecta		Philopotamidae	7	Simuliidae	
Ephemeroptera		Polycentropodidae	4	Tabanidae	2
Baetidae	143	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	6	Leptoceridae		Nematomorpha	1
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	4	Turbellaria	
Odonata		Rhyacophilidae	5	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae	1	Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	1	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	2	Psephenidae		Limnaeidae	
Leuctridae	24	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae	15	Corydalidae		Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae	4	Neuroptera		Isopoda	
Pteronarcyidae	3	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			
Trichoptera		Culicidae			
Hydropsychidae	17	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. INDIRU01	
Insecta		Philopotamidae		Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae	29	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	5	Poduridae
Ephemerellidae	6	Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae		Nematoda
Heptageniidae	1	Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neoephemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae		Phryganeidae		Lumbriculida
Polymitarcyidae		Sericostomatidae		Lumbriculidae
Potamanthidae		Uenoidae		Tubificida
Siphonuridae		Glossosomatidae		Platyhelminthes
Tricorythidae		Hydroptilidae		Turbellaria
Odonata		Rhyacophilidae	2	Planariidae
Aeshnidae		Lepidoptera		Mollusca
Cordulegastridae		Pyralidae		Bivalva
Corduliidae		Coleoptera		Unionidae
Gomphidae	1	Dytiscidae		Sphaeriidae
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae	4	Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae	2	Psephenidae		Limnaeidae
Leuctridae	3	Ptilodactylidae		Crustacea
Nemouridae	9	Megaloptera		Amphipoda
Peltoperlidae	5	Corydalidae		Gammaridae
Perlidae		Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae	1	Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	5	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	10	
Trichoptera		Culicidae	3	
Hydropsychidae	11	Muscidae		

MONROE COUNTY WATER QUALITY STUDY				SITE ID. FOHIRU01	
Insecta		Philopotamidae	4	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	2	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	2	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	9	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	3	Tubificida	
Siphonuridae	1	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	5	Turbellaria	
Odonata		Rhyacophilidae	4	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	3
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halipidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	3	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	8	Gammaridae	
Perlidae	7	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	5	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	19		
Trichoptera		Culicidae			
Hydropsychidae	37	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SWIFCR06		
Insecta		Philopotamidae	39	Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	1
Baetidae	2	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	1	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	3	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	2	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae	4	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	1	Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	64		
Trichoptera		Culicidae			
Hydropsychidae	66	Muscidae			

MONROE COUNTY WATER QUALITY STUDY				SITE ID. SWIFCR02	
Insecta		Philopotamidae	33	Simuliidae	
Ephemeroptera		Polycentropodidae	5	Tabanidae	2
Baetidae	4	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	2	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	5	Leptoceridae		Nematomorpha	
Leptophlebiidae	1	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	1	Turbellaria	
Odonata		Rhyacophilidae	3	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	3
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	2	Ancylidae	
Lestidae		Hydraenidae		Physidae	1
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	10	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	2	Gammaridae	
Perlidae	9	Sialidae		Talitridae	
Perlodidae	1	Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	71		
Trichoptera		Culicidae			
Hydropsychidae	49	Muscidae			

MONROE COUNTY WATER QUALITY STUDY				SITE ID. PARACR01	
Insecta		Philopotamidae	14	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	13	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	5	Poduridae	
Ephemerellidae	2	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	58	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	13	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	9	Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	13
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	10	Ancylidae	8
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	4	Limnaeidae	
Leuctridae	12	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	6	Gammaridae	
Perlidae	2	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	1	Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	77		
Trichoptera		Culicidae			
Hydropsychidae	71	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. FOHIRU09		
Insecta		Philopotamidae	5	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	7	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	1	Leptoceridae	1	Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		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	6
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		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	17	Gammaridae	2
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	157		
Trichoptera		Culicidae			
Hydropsychidae	144	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. FOHIRU04		
Insecta		Philopotamidae	31	Simuliidae	6
Ephemeroptera		Polycentropodidae	5	Tabanidae	3
Baetidae	113	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	2	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	2
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	7
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	2	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	6	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	62		
Trichoptera		Culicidae			
Hydropsychidae	57	Muscidae			



MONROE COUNTY WATER QUALITY STUDY			SITE ID. TOBYCR17		
Insecta		Philopotamidae	5	Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	30	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	4	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	4	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	9	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	2	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	3	Dytiscidae		Sphaeriidae	23
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae	1	Noteridae		Gastropoda	
Coenagrionidae	1	Elmidae	3	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae	1	Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	126		
Trichoptera		Culicidae			
Hydropsychidae	29	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TOBYCR18		
Insecta		Philopotamidae	11	Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	19	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	11	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	13	Leptoceridae	2	Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	7	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	4	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	5	Dytiscidae		Sphaeriidae	8
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	7	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limmichidae		Bulimidae	
Chloroperlidae		Psephenidae	1	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	3	Gammaridae	
Perlidae	6	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	6	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	57		
Trichoptera		Culicidae			
Hydropsychidae	65	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TOBYCR01		
Insecta		Philopotamidae	8	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	47	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	4	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	16	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	32	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	3	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	13	Dytiscidae		Sphaeriidae	2
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	18	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	3	Limnaeidae	
Leuctridae	1	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	4	Gammaridae	
Perlidae	20	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	56		
Trichoptera		Culicidae			
Hydropsychidae	74	Muscidae			

MONROE COUNTY WATER QUALITY STUDY				SITE ID. SWIFCR07	
Insecta		Philopotamidae	31	Simuliidae	
Ephemeroptera		Polycentropodidae	4	Tabanidae	
Baetidae	63	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	4	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	13	Leptoceridae		Nematomorpha	
Leptophlebiidae	5	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	23	Turbellaria	
Odonata		Rhyacophilidae	3	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	1	Psephenidae		Limnaeidae	
Leuctridae	13	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	3	Sialidae		Talitridae	
Perlodidae	1	Neuroptera		Isopoda	
Pteronarcyidae	2	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	60		
Trichoptera		Culicidae			
Hydropsychidae	27	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SWIFCRO5		
Insecta		Philopotamidae	4	Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	18	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	4	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	6	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae	1	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	3	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	17	Psephenidae		Limnaeidae	
Leuctridae	6	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae	1	Corydalidae	10	Gammaridae	
Perlidae	4	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	10	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	42		
Trichoptera		Culicidae			
Hydropsychidae	31	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SWIFCR03		
Insecta		Philopotamidae	22	Simuliidae	34
Ephemeroptera		Polycentropodidae	4	Tabanidae	
Baetidae	157	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	5	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	19	Turbellaria	
Odonata		Rhyacophilidae	4	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	3	Psephenidae		Limnaeidae	
Leuctridae	7	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae	1	Corydalidae	1	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	8	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	49		
Trichoptera		Culicidae			
Hydropsychidae	39	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. BULGRU01		
Insecta		Philopotamidae	17	Simuliidae	1
Ephemeroptera		Polycentropodidae	2	Tabanidae	
Baetidae	6	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	1	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		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		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	7	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	2	Psephenidae	2	Limnaeidae	
Leuctridae	14	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	17	Gammaridae	1
Perlidae	13	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	16
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	72		
Trichoptera		Culicidae			
Hydropsychidae	132	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR15		
Insecta		Philopotamidae	6	Simuliidae	2
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	13	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	12	Poduridae	
Ephemerellidae	3	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	42	Leptoceridae	1	Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	1	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	4	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	9	Ancylidae	3
Lestidae		Hydraenidae		Physidae	1
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	2	Limnaeidae	
Leuctridae	5	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	3	Sialidae	1	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	1	Arachnidia	
Corixidae		Tipulidae	6	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	114		
Trichoptera		Culicidae			
Hydropsychidae	34	Muscidae			



MONROE COUNTY WATER QUALITY STUDY				SITE ID. POCOCR18	
Insecta		Philopotamidae	3	Simuliidae	
Ephemeroptera		Polycentropodidae	4	Tabanidae	
Baetidae	18	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae	3	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	28	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae	1	Oligochaeta	
Oligoneuriidae	9	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	5	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	2
Capniidae		Limmichidae		Bulimidae	
Chloroperlidae	2	Psephenidae	4	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	4	Gammaridae	
Perlidae	8	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	8	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	93		
Trichoptera		Culicidae			
Hydropsychidae	59	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR22		
Insecta		Philopotamidae	19	Simuliidae	
Ephemeroptera		Polycentropodidae	3	Tabanidae	
Baetidae	16	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	13	Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	21	Leptoceridae	1	Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	6	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	2	Turbellaria	
Odonata		Rhyacophilidae	4	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyalidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	5	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	1	Limnaeidae	
Leuctridae	3	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	3	Gammaridae	
Perlidae	5	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae	1	Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	4	Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	57		
Trichoptera		Culicidae			
Hydropsychidae	62	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR14	
Insecta		Philopotamidae	4	Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae	13	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	3	Poduridae
Ephemerellidae	14	Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae		Nematoda
Heptageniidae	8	Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae	2	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
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae	6	Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae		Psephenidae	4	Limnaeidae
Leuctridae	1	Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae	1	Gammaridae
Perlidae	9	Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae		Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae	2	Arachnidia
Corixidae		Tipulidae	1	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	68	
Trichoptera		Culicidae		
Hydropsychidae	86	Muscidae		

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MCMICR21		
Insecta		Philopotamidae	2	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae		Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	4	Lepidostomatidae	1	Nemertea	
Ephemeridae		Helicopsychidae	2	Nematoda	
Heptageniidae	9	Leptoceridae		Nematomorpha	
Leptophlebiidae	1	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	5	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	2	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	2	Gammaridae	
Perlidae		Sialidae	1	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	7	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	226		
Trichoptera		Culicidae			
Hydropsychidae	23	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. DRSARU01		
Insecta		Philopotamidae	1	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	1	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae		Leptoceridae		Nematomorpha	
Leptophlebiidae	3	Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	5	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae	4	Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	1
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	2	Psephenidae		Limnaeidae	
Leuctridae	3	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	7	Gammaridae	
Perlidae		Sialidae	2	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	5	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	67		
Trichoptera		Culicidae			
Hydropsychidae	6	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCO CR20		
Insecta		Philopotamidae	19	Simuliidae	3
Ephemeroptera		Polycentropodidae		Tabanidae	1
Baetidae	53	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	5	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	17	Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyalidae		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	1	Psephenidae		Limnaeidae	
Leuctridae	3	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae	1	Corydalidae	3	Gammaridae	
Perlidae	3	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	32		
Trichoptera		Culicidae			
Hydropsychidae	16	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR16		
Insecta		Philopotamidae	79	Simuliidae	7
Ephemeroptera		Polycentropodidae		Tabanidae	4
Baetidae	59	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	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	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	8	Turbellaria	
Odonata		Rhyacophilidae	1	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	7
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	3
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	8	Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	6	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	42		
Trichoptera		Culicidae			
Hydropsychidae	38	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR17	
Insecta		Philopotamidae		Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae	129	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	4	Poduridae
Ephemerellidae	1	Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae		Nematoda
Heptageniidae	1	Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae		Phryganeidae		Lumbriculida
Polymitarciidae		Sericostomatidae		Lumbriculidae
Potamanthidae		Uenoidae		Tubificida
Siphonuridae		Glossosomatidae	3	Platyhelminthes
Tricorythidae		Hydroptilidae	6	Turbellaria
Odonata		Rhyacophilidae	2	Planariidae
Aeshnidae		Lepidoptera		Mollusca
Cordulegastridae		Pyralidae		Bivalva
Corduliidae		Coleoptera		Unionidae
Gomphidae		Dytiscidae		Sphaeriidae
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae		Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae	1	Psephenidae		Limnaeidae
Leuctridae	3	Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae		Gammaridae
Perlidae	1	Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae	1	Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	6	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	81	
Trichoptera		Culicidae		
Hydropsychidae	29	Muscidae		



MONROE COUNTY WATER QUALITY STUDY			SITE ID. POCOCR19		
Insecta		Philopotamidae	31	Simuliidae	6
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	37	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	9	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	5	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae	3	Planariidae	
Aeshnidae	1	Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	1
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	2	Psephenidae		Limnaeidae	1
Leuctridae	8	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	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	12	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	197		
Trichoptera		Culicidae			
Hydropsychidae	42	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SCOTCR04		
Insecta		Philopotamidae	2	Simuliidae	3
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	4	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	1	Leptoceridae		Nematomorpha	
Leptophlebiidae	1	Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae	1	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae	3	Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	3	Dytiscidae		Sphaeriidae	15
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae	2	Noteridae		Gastropoda	
Coenagrionidae		Elmidae	31	Ancyliidae	33
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	4	Limnaeidae	2
Leuctridae	4	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	6	Gammaridae	
Perlidae	2	Sialidae	1	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	67		
Trichoptera		Culicidae			
Hydropsychidae	24	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SCOTCR05		
Insecta		Philopotamidae	2	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	11	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	9	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	3	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	3	Ancylidae	6
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	5	Limnaeidae	
Leuctridae	1	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae		Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydridae	1	Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	6		
Trichoptera		Culicidae			
Hydropsychidae	71	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TUNKCR06		
Insecta		Philopotamidae		Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae		Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	2	Poduridae	
Ephemerellidae	1	Lepidostomatidae	2	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	15	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae	1	Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae	2	Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae	5	Noteridae		Gastropoda	
Coenagrionidae	21	Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	5	Gammaridae	
Perlidae		Sialidae	7	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	40
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	56		
Trichoptera		Culicidae			
Hydropsychidae	6	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TUNKCR03		
Insecta		Philopotamidae	17	Simuliidae	7
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	21	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	18	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	32	Turbellaria	
Odonata		Rhyacophilidae	1	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	24	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	1	Gammaridae	
Perlidae	6	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae	10	Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	137		
Trichoptera		Culicidae			
Hydropsychidae	76	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TOBYCR14		
Insecta		Philopotamidae	10	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae		Psychomyiidae		Dixidae	
Baetiscidae	30	Beraeidae		Collembola	
Caenidae		Brachycentridae	2	Poduridae	
Ephemerellidae	5	Lepidostomatidae	1	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	16	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	9	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	3	Tubificida	
Siphonuridae	21	Glossosomatidae		Platyhelminthes	
Tricorythidae	2	Hydroptilidae	6	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	13
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Halipidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	19	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	2	Gammaridae	
Perlidae	9	Sialidae	1	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	4	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	74		
Trichoptera		Culicidae			
Hydropsychidae	82	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. TROUCR02		
Insecta		Philopotamidae	27	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	1	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	10	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	1	Dytiscidae		Sphaeriidae	3
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	3	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	4	Gammaridae	
Perlidae	4	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	43		
Trichoptera		Culicidae			
Hydropsychidae	197	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. HAWKRU02		
Insecta		Philopotamidae		Simuliidae	19
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	8	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	3	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae	1	Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	19	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	34
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae	5	Noteridae		Gastropoda	
Coenagrionidae		Elmidae	6	Ancyliidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	27	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	8	Gammaridae	
Perlidae	2	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	92		
Trichoptera		Culicidae			
Hydropsychidae	9	Muscidae			



MONROE COUNTY WATER QUALITY STUDY			SITE ID. REDRU03	
Insecta		Philopotamidae		Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae		Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae	1	Brachycentridae		Poduridae
Ephemerellidae	6	Lepidostomatidae	1	Nemertea
Ephemeridae	2	Helicopsychidae		Nematoda
Heptageniidae	2	Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae	10	Annelida
Metretopodidae		Molannidae	1	Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae		Phryganeidae		Lumbriculida
Polymitarciidae		Sericostomatidae		Lumbriculidae
Potamanthidae		Uenoidae		Tubificida
Siphonuridae		Glossosomatidae		Platyhelminthes
Tricorythidae		Hydroptilidae		Turbellaria
Odonata		Rhyacophilidae		Planariidae
Aeshnidae	2	Lepidoptera		Mollusca
Cordulegastridae		Pyralidae		Bivalva
Corduliidae		Coleoptera		Unionidae
Gomphidae		Dytiscidae		Sphaeriidae
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	5	Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae	3	Gammaridae
Perlidae		Sialidae	8	Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae		Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	1	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	69	
Trichoptera		Culicidae		
Hydropsychidae		Muscidae		

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MARSCR08	
Insecta		Philopotamidae	3	Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae	3	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	4	Poduridae
Ephemerellidae	10	Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae	11	Nematoda
Heptageniidae	12	Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae	19	Phryganeidae		Lumbriculida
Polymitarcyidae		Sericostomatidae		Lumbriculidae
Potamanthidae		Uenoidae		Tubificida
Siphonuridae		Glossosomatidae		Platyhelminthes
Tricorythidae	4	Hydroptilidae		Turbellaria
Odonata		Rhyacophilidae		Planariidae
Aeshnidae		Lepidoptera		Mollusca
Cordulegastridae		Pyralidae		Bivalva
Corduliidae		Coleoptera		Unionidae
Gomphidae		Dytiscidae		Sphaeriidae
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae	7	Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae		Psephenidae	6	Limnaeidae
Leuctridae	6	Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae	1	Gammaridae
Perlidae	2	Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae		Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	1	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	42	
Trichoptera		Culicidae		
Hydropsychidae	23	Muscidae		

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MARSCR09A		
Insecta		Philopotamidae	10	Simuliidae	
Ephemeroptera		Polycentropodidae	2	Tabanidae	
Baetidae	9	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	3	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	31	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	4
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	11	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	12	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae	2	Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	3	Dytiscidae		Sphaeriidae	42
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	20	Ancylidae	12
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	31	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	10	Gammaridae	
Perlidae	7	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	3	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	37		
Trichoptera		Culicidae			
Hydropsychidae	28	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MARSCR09B		
Insecta		Philopotamidae	21	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	11	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	2	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae	1	Nematoda	
Heptageniidae	52	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	12	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	5
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	33	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	39
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae	2	Elmidae	14	Ancylidae	23
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	21	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	17	Gammaridae	
Perlidae	5	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	7	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	55		
Trichoptera		Culicidae			
Hydropsychidae	54	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. SAMBCR10		
Insecta		Philopotamidae	44	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	20	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae	2	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	31	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	5
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	5	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	1	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae		Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	41	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	4	Sialidae		Talitridae	38
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	4	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	53		
Trichoptera		Culicidae			
Hydropsychidae	65	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MCMICR30	
Insecta		Philopotamidae		Simuliidae
Ephemeroptera		Polycentropodidae		Tabanidae
Baetidae	3	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae	1	Poduridae
Ephemerellidae	1	Lepidostomatidae		Nemertea
Ephemeridae		Helicopsychidae		Nematoda
Heptageniidae		Leptoceridae		Nematomorpha
Leptophlebiidae		Limnephilidae		Annelida
Metretopodidae		Molannidae		Hirudinea
Neophemeridae		Odontoceridae		Oligochaeta
Oligoneuriidae	2	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
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae	1	Gastropoda
Coenagrionidae		Elmidae		Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae		Psephenidae	1	Limnaeidae
Leuctridae		Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae		Gammaridae
Perlidae	1	Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae		Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae		Arachnidia
Corixidae		Tipulidae	1	Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	286	
Trichoptera		Culicidae		
Hydropsychidae	15	Muscidae		

MONROE COUNTY WATER QUALITY STUDY			SITE ID. MCMICR28		
Insecta		Philopotamidae	1	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	9	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	16	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	7	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	6	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	2
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	13	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyalidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	14
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	9	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	6
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	1	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	2	Gammaridae	
Perlidae	1	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	32		
Trichoptera		Culicidae			
Hydropsychidae	25	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POHOCR07		
Insecta		Philopotamidae	7	Simuliidae	1
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	27	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	81	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae	1	Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	5	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	11	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	2	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	18
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	5	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	71	Limnaeidae	
Leuctridae	6	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	3	Gammaridae	2
Perlidae	1	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	2	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	43		
Trichoptera		Culicidae			
Hydropsychidae	26	Muscidae			



MONROE COUNTY WATER QUALITY STUDY			SITE ID. WEIRCR01		
Insecta		Philopotamidae		Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	2	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	4	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	2	Leptoceridae		Nematomorpha	
Leptophlebiidae	1	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	2
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarciidae		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	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		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		Gammaridae	
Perlidae		Sialidae		Talitridae	23
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	11
Taeniopterygidae	1	Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	17		
Trichoptera		Culicidae			
Hydropsychidae	6	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. POHOCR06		
Insecta		Philopotamidae	19	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	13	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae		Leptoceridae		Nematomorpha	
Leptophlebiidae		Limmephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	17	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	2
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae		Glossosomatidae	3	Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	2
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	15	Ancyliidae	1
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	4	Limnaeidae	
Leuctridae	2	Ptilodactylidae		Crustacea	
Nemouridae	1	Megaloptera		Amphipoda	
Peltoperlidae	3	Corydalidae		Gammaridae	1
Perlidae		Sialidae		Talitridae	
Perlodidae	1	Neuroptera		Isopoda	
Pteronarcyidae		Sisyriidae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae		Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	38		
Trichoptera		Culicidae			
Hydropsychidae	64	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. BUCKCR01		
Insecta		Philopotamidae	4	Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	19	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	51	Leptoceridae		Nematomorpha	
Leptophlebiidae	3	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	14	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	25	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	6	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	1
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	1	Psephenidae	9	Limnaeidae	
Leuctridae	5	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	2	Gammaridae	
Perlidae	6	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae	1	Cambaridae	2
Belostomatidae		Athericidae	3	Arachnidia	
Corixidae		Tipulidae	4	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	46		
Trichoptera		Culicidae			
Hydropsychidae	66	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. PRINRU01		
Insecta		Philopotamidae		Simuliidae	
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	24	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	4	Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	28	Leptoceridae		Nematomorpha	
Leptophlebiidae	4	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae		Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	5	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	3	Ancylidae	1
Lestidae		Hydraenidae		Physidae	1
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	22	Limnaeidae	
Leuctridae	3	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	1	Sialidae	1	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae	1	Cambaridae	1
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesovelliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	22		
Trichoptera		Culicidae			
Hydropsychidae	9	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. AQUACR09		
Insecta		Philopotamidae	31	Simuliidae	3
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	22	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemereillidae	4	Lepidostomatidae	2	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	21	Leptoceridae		Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	19	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	3
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	28	Glossosomatidae	2	Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae	3	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	1	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	25	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	8	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	14	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	1	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	32		
Trichoptera		Culicidae			
Hydropsychidae	111	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. AQUACR10		
Insecta		Philopotamidae	1	Simuliidae	1
Ephemeroptera		Polycentropodidae		Tabanidae	
Baetidae	12	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae	1	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	11	Leptoceridae	1	Nematomorpha	
Leptophlebiidae		Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neoephemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	6	Phryganeidae		Lumbriculida	
Polymitarciidae		Sericostomatidae		Lumbriculidae	2
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	3	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae	1	Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Cordulidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	6	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae		Limnaeidae	
Leuctridae	12	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	6	Gammaridae	
Perlidae	4	Sialidae	2	Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	1
Belostomatidae		Athericidae	3	Arachnidia	
Corixidae		Tipulidae	11	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesovelliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	23		
Trichoptera		Culicidae			
Hydropsychidae	19	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. BRODCR12		
Insecta		Philopotamidae	10	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	42	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	5	Poduridae	
Ephemerellidae	9	Lepidostomatidae	2	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	91	Leptoceridae		Nematomorpha	
Leptophlebiidae	25	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	31	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	11	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	6	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	12	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae	1	Limnichidae		Bulimidae	
Chloroperlidae	3	Psephenidae	1	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae	4	Corydalidae	1	Gammaridae	
Perlidae	1	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	3	Arachnidia	
Corixidae		Tipulidae	4	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	73		
Trichoptera		Culicidae			
Hydropsychidae	44	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. BRODCR01		
Insecta		Philopotamidae	29	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	51	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	12	Poduridae	
Ephemerellidae		Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	41	Leptoceridae		Nematomorpha	
Leptophlebiidae	8	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	28	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	
Potamanthidae		Uenoidae		Tubificida	
Siphonuridae	76	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	12	Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	2	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	7	Ancylidae	1
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	4	Psephenidae	1	Limnaeidae	
Leuctridae	19	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	1	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae	2	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae	7	Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	8	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	49		
Trichoptera		Culicidae			
Hydropsychidae	38	Muscidae			



MONROE COUNTY WATER QUALITY STUDY			SITE ID. BUSHCR07		
Insecta		Philopotamidae	6	Simuliidae	
Ephemeroptera		Polycentropodidae	1	Tabanidae	
Baetidae	19	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae		Poduridae	
Ephemerellidae	2	Lepidostomatidae	3	Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	25	Leptoceridae		Nematomorpha	
Leptophlebiidae	2	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae		Oligochaeta	
Oligoneuriidae	20	Phryganeidae	2	Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae	6	Tubificida	
Siphonuridae	14	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae		Turbellaria	
Odonata		Rhyacophilidae	2	Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyralidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae		Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	11	Ancylidae	
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae		Psephenidae	3	Limnaeidae	
Leuctridae		Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae		Gammaridae	
Perlidae	4	Sialidae		Talitridae	
Perlodidae		Neuroptera		Isopoda	
Pteronarcyidae		Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae	9	Arachnidia	
Corixidae		Tipulidae	4	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	39		
Trichoptera		Culicidae			
Hydropsychidae	73	Muscidae			

MONROE COUNTY WATER QUALITY STUDY			SITE ID. BRODCR13	
Insecta		Philopotamidae	2	Simuliidae
Ephemeroptera		Polycentropodidae	1	Tabanidae
Baetidae	13	Psychomyiidae		Dixidae
Baetiscidae		Beraeidae		Collembola
Caenidae		Brachycentridae		Poduridae
Ephemerellidae	4	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
Libellulidae		Gyrinidae		Cyrenidae
Macromiidae		Haliplidae		Corbiculidae
Calopterygidae		Noteridae		Gastropoda
Coenagrionidae		Elmidae	8	Ancylidae
Lestidae		Hydraenidae		Physidae
Plecoptera		Hydrophilidae		Planorbidae
Capniidae		Limnichidae		Bulimidae
Chloroperlidae		Psephenidae		Limnaeidae
Leuctridae		Ptilodactylidae		Crustacea
Nemouridae		Megaloptera		Amphipoda
Peltoperlidae		Corydalidae	8	Gammaridae
Perlidae		Sialidae		Talitridae
Perlodidae		Neuroptera		Isopoda
Pteronarcyidae		Sisyridae		Asellidae
Taeniopterygidae		Diptera		Decapoda
Hemiptera		Ephydriidae		Cambaridae
Belostomatidae		Athericidae	2	Arachnidia
Corixidae		Tipulidae		Acari
Gerridae		Empididae		Hydrachnidia
Mesoveliidae		Blephariceridae		
Notonectidae		Ceratopogonidae		
Saldidae		Chaoboridae		
Veliidae		Chironomidae	149	
Trichoptera		Culicidae		
Hydropsychidae	69	Muscidae		