DATA SUBMISSION FORM

(For Consideration in the Year 2007 303(d) Listing Process)
PA Department of Environmental Protection
Bureau of Water Supply and Wastewater Management

PART 1. Identification of Waterbody

Waterbody Name:

_____

Tributary to: _____ County

_____

Are you submitting copies of the appropriate U.S.G.S 7.5' topographic quadrangles with segment(s) clearly highlighted? Yes_____ No _____ If no, please provide the following information:

Segment Limits (Lat./Long.): Upstream: _____ Downstream:

_____

(for impounded waters, please provide the lat./long. of the impoundment's mid-point

_____

PART 2. Investigator(s) Information

Name of group/individual, which collected the data/information:

_____

Contact Person for Questions regarding the data: _____

Phone #: _____

PART 3. Data Submission Content

What type(s) of data/information is/are being submitted? (Check all that apply)

Water Chemistry: _____ Bacteriological: _____ Macroinvertebrate: _____

Fish: _____

PART 4. Quality Assurance/Quality Control Information

Was the data or information being submitted for consideration collected under a program with either a written study design completed in accordance with DEP's "Designing Your Monitoring Program- A Technical Handbook for Community-Based Monitoring in Pennsylvania", a written quality assurance project plan completed in accordance with EPA's "The Volunteer Monitors Guide to Quality Assurance Project Plans" or a standard QA/QC protocol? Yes _____ No _____ If yes, please submit a copy of the study design, QAPP or QA/QC protocol.

Was the data collected under a program that adhered to a quality control plan that included external quality control checks such as split samples analyzed by an outside lab? Yes _____ No _____ If yes, please submit a copy of the outside lab analysis for review.

Is the submitted data or information incorporated into a finalized report, document, or journal article?
Yes _____ No _____ If yes, please include a copy with this submission form.

If the data being submitted is biological data, who is/are the source(s) of the taxonomic expertise? _____

_____

_____

Did this person(s) perform all of the taxonomic work? Yes: ____ No: ____ Supervise? Yes: ____ No: ____

What are their credentials?

_____

_____

_____

_____

If the stream assessment is based on family-level macroinvertebrate identification, has this person(s) successfully completed DEP approved training in surface water assessment and family-level macroinvertebrate data interpretation? Yes: ____ No: ____ When? _____ Who was the instructor(s) for the training?

PART 5. Comments

Please provide any additional comments that might assist in DEP's evaluation of your data and information:

_____

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PART 6. Comments about the stream segment

Please provide detailed comments about the segment that might assist in DEP's evaluation of your data and information. Be certain to include a discussion of possible impairment sources (i.e. agriculture, municipal sewer outfall, etc.) and causes (sediment, habitat alterations, nutrients, etc.):

_____

_____

_____

_____

_____

Please submit this form and all supporting documentation to:

Bureau of Watershed Management
Citizens' Volunteer Monitoring Program
P. O. Box 8555
Harrisburg, PA 17105-8555

Anyone with questions regarding the completion of this form, or the 303(d) listing process in general, may contact:

Rod Kime, Water Pollution Biologist
Division of Water Quality Assessment and Standards
(717) 787-9637
rkime@state.pa.us

Any volunteer monitoring questions can be directed to:

Cheryl Snyder, Citizens' Volunteer Monitoring Coordinator
(717) 772-5807
chesnyder@state.pa.us

WATER QUALITY ASSESSMENT
305(b) Report/ 303(d) List
EXISTING AND READILY AVAILABLE DATA
MINIMAL DATA REQUIREMENTS

This is a summary of the process that the Department uses in its evaluation of outside data and information submitted for consideration in the development of the Water Quality Assessment 305(b) Report and 303(d) list of impaired waters. The Department will consider all data submissions from outside agencies in its decision-making process. Data that meets the minimal data requirements provided in this document may be used in the listing process and will be incorporated into the Department's 305(b) database. Data not meeting the requirements may be helpful for other purposes such as public education or the targeting of waters for further study. The 303(d) list of impaired waters is a subset of the 305(b) Report on the state of the waters.

Section 305(b) of the Clean Water Act requires states, territories, tribes and interstate commission to assess the health of their waters and the extent to which water quality standards and the basic goals of the Clean Water Act are being met. The goals of the Clean Water Act are to achieve and maintain water quality that provides for healthy communities of fish and shellfish and that allows for recreation in and on the water. States collect data and information that allow them to

characterize whether water quality meets these and other uses for their waters, which are expressed in water quality standards that each state sets.
Water quality standards for all Pennsylvania surface waters can be found in Chapter 93 - Water Quality Standards and Chapter 16 - Water Quality Toxics Management Strategy (PA Code - Title 25. Environmental Protection).

In order for the Department to use data in the 305(b)/303(d) process, it must be of a documented quality. The Department will screen all outside sources of data for the following minimal requirements:

1. Written documentation of the protocols used in sampling and analysis describing quality assurance and quality control measures in the form of a Monitoring Study Design or Quality Assurance Project Plan.
2. Location and extent of the waterbody,

The Department recognizes that there are groups and organizations that do not currently have established sampling and analysis protocols, and a Monitoring Study Design or Quality Assurance Project Plan. Groups or individuals that would like to begin monitoring with the goal of having their data utilized by the Department in the 305(b)/ 303(d) process, are encouraged to contact the Department's Citizens' Volunteer Monitoring Program (CVMP) for assistance. The CVMP has published a handbook for volunteer monitors: "**Designing Your Monitoring Program – A Technical Handbook for Community-Based Monitoring in Pennsylvania**." Those groups without established QA/QC plans are also encouraged to review the handbook. A copy of this document can be obtained by contacting:

Ms Cheryl Snyder
Citizens' Volunteer Monitoring Coordinator
Bureau of Watershed Management
P.O. Box 8555
Harrisburg, PA 17105-8555

Telephone (717) 772-5807
E-mail chesnyder@state.pa.us

Documentation of a Water Quality Standard Violation:

For any given waterbody in the Commonwealth, the applicable water quality standard (as found in Chapter 93 - Water Quality Standards and Chapter 16 - Water Quality Toxics Management Strategy <PA Code - Title 25. Environmental Protection>) is comprised of the designated uses and numeric and/or narrative criteria established to protect those uses. Documented evidence of a use impairment or criterion violation constitutes a violation of the applicable water quality standard. Because of the significance attached to 303(d)-listed waters, it is important that any determination of a water quality standard violation be based on scientifically sound methods and data. Assessments based on the comparison of numeric criteria with long-term water quality data typically meet this principle. Chemical assessments based on single, one-time grab samples generally do not. Single, one-time biological surveys conducted to assess support of designated aquatic life uses are generally acceptable because the biology is a long-term indicator of water quality. Sufficient evidence must be presented for both chemical and biological data to indicate that the assessment reflects the conditions throughout the entire waterbody segment and not simply a single site.

In reviewing data submitted by outside sources, the Department will use the following guidelines to determine if criteria are being violated and/or uses are being impaired.

Chemical Data

Data age	Data must be less than 5 years old, unless it can be demonstrated that data is representative of current conditions.
Chemical Parameters	Only those chemical parameters for which a criterion has been established can be considered. Applicable water quality criteria vary depending on the waterbody being considered. Criteria for all waterbodies in the Commonwealth can be found in Chapters 93 - Water Quality Standards and 16 - Water Quality Toxics Management Strategy of the Department's Rules and Regulations (PA Code - Title 25. Environmental Protection)
Minimum number of sampling sites	A minimum of two sites must be sampled for each stream segment. If landuse changes or point sources enter the stream between the upstream and downstream boundary points, more sites may be required. See the discussion "Location of Waterbody" for more details.
Sampling duration and frequency	To avoid the problems associated with serial correlation of time series data, sample collections must be at least two weeks apart and collected over a period of one to two years.
Minimum number of samples required for data to be considered representative of actual conditions	A minimum of 24 samples for each site is required. Single one-time grab samples will not be considered.
Required analysis to determine if samples exceed water quality criteria	To be performed by DEP staff using procedures outlined in the current Assessment and Listing Methodology.

Bacteriological Data

Data age	Data must be less than 5 years old, unless it can be demonstrated that data is representative of current conditions.
Minimum number of sampling sites	A minimum of two sites must be sampled for each stream segment. If landuse changes or point sources enter the stream between the upstream and downstream boundary points, more sites may be required. See the discussion "Location of Waterbody" for more details.
Sampling duration and frequency	No more than one sample per day. A minimum of 5 samples collected on different days spanning a minimum of 14 days and a maximum of 30 days constitutes one monthly sampling group.
Minimum number of samples required for data to be considered representative of actual conditions.	Two monthly sampling groups collected at least one month apart during the recreation season (May 1-September 30).
Required analysis to determine if samples exceed water quality criteria	To be performed by DEP staff using procedures outlined in the current Assessment and Listing Methodology.

Macroinvertebrate/Fish Data

Data age	Data must be less than 5 years old, unless it can be demonstrated that data is representative of current conditions.
Minimum number of sampling sites	A minimum of two sites must be sampled for each stream segment. If landuse changes or point sources enter the stream between the upstream and downstream boundary points, more sites may be required. See the discussion "Location of Waterbody" for more details.
Sampling duration	Single one-time grab samples are acceptable.
Acceptable data	Macroinvertebrates must be identified to the lowest practical taxonomic level (generally to genus, except for snails, worms, clams, and midges). Family level macroinvertebrate identification is acceptable under the circumstances described below. Fishes must be identified to species.
Quality assurance for macroinvertebrate identification.	Persons with adequate knowledge and training in aquatic biology must identify the macroinvertebrates. Family-level data will be accepted, provided the taxonomist has appropriately completed DEP approved training on interpreting family-level data. A completed "Family-level DEP checklist" must be submitted.
Required analysis to determine if samples exceed water quality criteria	To be performed by DEP staff using procedures outlined in the current Assessment and Listing Methodology.

Location of Waterbody:

It is imperative that all data and information submitted to DEP for consideration in the 305(b)/ 303(d) process include sufficient information regarding the location and extent of water quality limited segments. The Department requires that information submitted include copies of the appropriate U.S.G.S 7.5' topographic quadrangles with impaired segments clearly highlighted. For assessments that document impairments to entire basins, identifying the location of the mouth of the major stream is sufficient. In this latter case, all segments upstream of the mouth will be assigned the same impaired or attained status.

The Department defines a stream segment as the portion of a stream between an upstream tributary and the next downstream tributary. Assessments may consist of one or multiple segments. For headwater sections, the first segment extends from the source to the first tributary. The Department uses USGS 7.5 minute quadrangle maps (1:24,000 scale) to identify tributaries and the resulting stream segments. The rationale for segmenting streams is that tributaries can deliver pollution loads and/or dilution water in quantities sufficient to affect the water quality of the receiving stream. Some tributaries have a flow so small in relation to the mainstem that they are not a factor in the overall quality of the mainstem. There is no need to place sampling sites around these tributaries.

After identifying a stream segment for study, sampling locations should be situated so they reflect the quality of all waters upstream to the next sampling point. A minimum of two sites is required to assess the quality of a stream segment. One location is just above the upstream tributary to measure the water quality entering the stream segment (background water quality) and another location just above the downstream tributary to measure the water quality as it flows out of the segment.

Outside sources of data and information that fail to adequately delineate a stream segment, cannot be used in the 305(b)/303(d) process. It is imperative that submitted information clearly identifies the extent of the waterbody segment(s) to which the data applies.

Quality Assurance/Quality Control:

All reports and data submitted to the Department must be accompanied by either a written study design completed in accordance with DEP's "Designing Your Monitoring Program – A Technical Handbook for Community-Based Monitoring in Pennsylvania", a written quality assurance project plan completed in accordance with EPA's "The Volunteer Monitors Guide to Quality Assurance Project Plans" or a standard QA/QC protocol. A quality assurance plan should be adhered to that includes external checks such as split sample analysis by DEPcertified labs.

Chemical and Bacteriological Data

Guidance for QA/QC and monitoring of chemical and bacteriological data collection is available in PA DEP's "Designing Your Monitoring Program – A Technical Handbook For Community-Based Monitoring in Pennsylvania or EPA's The Volunteer Monitor's Guide to Quality Assurance Project Plans, EPA 841-B-96-003. The DEP guidance can be found at www.dep.state.pa.us, direct link-volunteer monitoring.
The EPA guidance can be found at http://www.epa.gov/OWOW/monitoring/volunteer/qappcovr.htm.

Biological Data

The Department recommends use of the Rapid Bioassessment Protocol described in "Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers; Periphyton, Benthic Macroinvertebrates, and Fish", EPA 841-B-99-002, July 1999.

The Department uses a specialized macroinvertebrate assessment method based on Family level identification in the field. This special Surface Water Assessment Protocol is acceptable for use by other groups only if they complete the DEP approved training on interpreting family-level data and the persons doing the collection and evaluations have adequate knowledge and training in aquatic biology.

Other analytical methods will be considered if submitted to and agreed upon by the Department.