

Appendix B

Public Involvement in Compiling Ohio's 2006 Section 303(d) List of Impaired Waters

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B.1 Summary of Listing Recommendations of the Ohio TMDL External Advisory Group

The following is from the Executive Summary of “Recommendations on Total Maximum Daily Loads,” Report to the Director of the Ohio EPA, June 30, 2000, prepared by the Ohio EPA External Advisory Group on Total Maximum Daily Loads.

The Listing Subgroup prepared sixteen major recommendations in a number of important areas related to listing and de-listing of the waters on Ohio’s TMDL (303d) list. Recommendations were made in the areas of monitoring and data, priority setting and public involvement.

- **Monitoring and Data**

The Listing Subgroup urges the Ohio EPA to increase the coverage of monitoring in Ohio to allow watersheds to be listed and de-listed with sufficient time for the TMDL process to address the range of impaired waters across the State. The subgroup is especially concerned about the number of waters for which data is unavailable, insufficient or too old with which to make sound decisions about listing and de-listing.

Related to the increase in monitoring is the need to make all the information used in the TMDL process promptly available to stakeholders and the public in easily understandable and easily accessible formats (e.g., web). Because of the importance of human health concerns, all human health and fish tissue data collected by the various resource agencies in Ohio (state, local, and federal) should be coordinated and available electronically for the TMDL process.

Ohio EPA should investigate other available information sources, and each type of data collected and used in the TMDL process should have an appropriate and adequate level of accuracy, precision, and reliability for its intended use in the TMDL process. The white paper the subgroup produced on minimum data quality requirements for listing and de-listing waters comprises its recommendation for minimum requirements related to the listing process.

- **Priority Setting**

The Listing Subgroup recognizes that the TMDL process cannot immediately address all impaired waters. As a result, the subgroup recommends that a priority system be developed to allow Ohio EPA to address some problem areas more quickly, and perhaps with more effort, than others. The subgroup recommends that human health risks should receive additional priority in the TMDL process, including impaired and threatened public water supplies. Because of the predominance of habitat impairment of aquatic life in Ohio, waters impaired by habitat should be incorporated into the priority process as if a TMDL were required.

The Listing Subgroup recognizes that there are environmental costs to deferring certain waters until late in the process, when they may then be more difficult or less able to be restored. Ohio EPA should quantify the “cost of inaction” and incorporate this factor into its priority system. Ohio EPA should also develop a clear decision making process, using

the factors mentioned here and others, including the presence of federal/state endangered or threatened species, restorability, and magnitude of impairment, and make this available for public review.

- Public Involvement

The Listing Subgroup recommends that public involvement be incorporated throughout the listing process. The process of listing and identifying causes and sources of impairment should be clearly and concisely summarized in the 303(d) list introduction. How various types of data can and will be used should also be described, and public input on all aspects of the proposed list should be solicited. Finally, the Ohio EPA should provide a specific mechanism for the public to appeal the agency's decisions on listing, failure to list, de-listing or acceptance of data.

B.2 Solicitation for External Water Quality Data, 2006 Integrated Report Project (December 6, 2005)

Date December 6, 2005

Re Solicitation for External Water Quality Data, 2006 Integrated Report Project
(No action is required on your part - submission of data is voluntary)

To: Interested Parties

From George Elmaraghy, Chief
Division of Surface Water

The group of Interested Parties receiving this invitation is limited to those who provided data subsequent to the similar call for data for the 2004 Integrated Report (dated August 26, 2003). The U.S. Environmental Protection Agency has suggested that, at a minimum, these parties be solicited for any readily available data they may wish to provide for consideration in the preparation of the 2006 Integrated Report.

At this time, the Ohio EPA Division of Surface Water (DSW) is soliciting readily available bacteria data for use in the 2006 Integrated Report. The report, due to U.S. EPA on April 1, 2006, fulfills the State's reporting obligations under Sections 305(b) and 303(d) of the Clean Water Act. The 2006 Integrated Report will use the same methodology for Recreation Use analysis as used in 2004. That evaluation was based on data collected by Ohio EPA and others (as outlined below) and readily available in electronic form.

Ohio EPA measures recreational use attainment by comparing the level of indicator bacteria present in ambient water samples against the bacteria criteria contained in Ohio's water quality standards (<http://www.epa.state.oh.us/dsw/rules/3745-1.html>). These indicator bacteria serve as predictors for the presence of enteric pathogens in the water. Exposure to pathogens as a result of recreating in contaminated waters may lead to a variety of illnesses such as gastroenteritis, dermatitis, conjunctivitis, and "swimmer's ear." As the level of indicator bacteria in the water rises, the risk of contracting illness as a result of exposure to pathogens in the water rises. The two types of indicator bacteria that Ohio EPA utilizes are fecal coliform and *E. coli*.

Ohio EPA intends to use two sources of external bacteria data (listed below) that are already accessible to the Agency (approximately 25,000 data records were generated from these sources for use in the 2004 Integrated Report). Additional data associated with these outside data collection efforts may also be available and the Agency is soliciting this information.

- Data collected by NPDES permit holders at ambient sites upstream and downstream of discharge locations and reported in Monthly Operating Reports - Ohio EPA will extract this data from the SWIMS data base. It is unnecessary to resubmit data from monthly

operating reports (MORs). However, we think it is likely that some NPDES permit holders collect bacteria data at additional ambient stations. Ohio EPA is specifically soliciting NPDES permit holders for these test results. Data must have been collected after May 1, 2001 and must meet the basic terms of acceptability found in Attachment 1. Data must be provided in electronic data base or spreadsheet format such as STORET, Excel or Access. The submission of data should be made to the person listed below and be submitted no later than December 30, 2005.

- Data collected by health departments and park officials at public bathing beaches - The bathing beach monitoring program is a cooperative effort of the Ohio Department of Health, the Department of Natural Resources, local health departments, and private and public organizations. The goal of the program is to protect the public from risks of contracting waterborne diseases from exposure to contaminated waters at public access beaches on Lake Erie and inland lakes and reservoirs. The cooperating agencies sample and analyze water from bathing beaches and recommend the posting of advisory signs warning the public when bacteria levels exceed Ohio's water quality standards. Sample results are compiled by the Ohio Department of Health and are posted on the beach monitoring web site (www.odh.state.oh.us/ODHPrograms/beach/beachmain.htm). Some health departments and State parks may collect bacteria data at additional ambient stations. Ohio EPA is specifically soliciting organizations for these test results. Data must have been collected after May 1, 2001 and must meet the basic terms of acceptability listed in Attachment 1. Data must be provided in electronic data base or spreadsheet format such as STORET, Excel or Access. The submission of data should be made to the person listed below and be submitted no later than December 30, 2005.

There may be additional bacteria monitoring programs in Ohio. The use of data from such sources will be determined on a case by case basis. If your organization has bacteria data collected from surface waters in Ohio, then Ohio EPA would be interested in discussing its possible use in the Integrated Report. Contact Chris Skalski at (614) 644-2144 or chris.skalski@epa.state.oh.us before preparing and submitting any information. The Agency's capacity to accept and utilize the data in preparation of the Integrated Report is dependent upon a variety of factors and the use of all data brought to our attention may not be possible. Data must have been collected after May 1, 2001 and must meet the basic acceptability specifications listed in Attachment 1. Data must be provided in electronic format such as STORET, Excel or Access.

Submit data and supporting information listed in Attachment 1 by December 30, 2005, to Chris Skalski, chris.skalski@epa.state.oh.us, Ohio EPA/DSW, P.O. Box 1049, Columbus, Ohio 43216-1049.

Attachment 1

Solicitation for External Water Quality Data, 2006 Integrated Report Project (CWA Section 303(d) listing of impaired water uses)

An individual or organization who submits bacteria data to Ohio EPA for consideration in the 2006 Integrated Report shall attest to the validity of the data and adhere to the data quality specification listed here. The submission of data must cover the following:

- A. Sampling and Test Methods, QA/QC Specifications: Sampling must be conducted in a manner consistent with procedures contained in the 20th edition of Standard Methods for the Examination of Water and Wastewater (1998) or the protocol outlined in Ohio EPA Water Quality Standard Guidance Number 3 entitled "Sampling Methods for Documentation of a Public Health Nuisance under OAC Rule 3745-1-04(F) and (G) - August 20, 1998 (<http://www.epa.state.oh.us/dsw/guidance/wqs3.pdf>).

Analytical testing must be conducted in accordance with U.S. EPA approved methods under 40 CFR 136 (<http://www.epa.gov/waterscience/methods/>) (also see http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr136_00.html). The name of the procedure used to analyze the sample must be identified. Data submissions must include a description of the Quality Assurance/Quality Control (QA/QC) plans under which the bacteria sample analysis occurred. This should address topics such as sample handling and preservation, sample holding time, chain of custody, precision, accuracy, etc.

- B. Description of Sampling Program: A brief description of the purpose of data collection and the sampling design considerations should be provided. Are specific sources of potential contamination under investigation? Are samples collected at fixed station locations? How often and under what kinds of environmental conditions are samples collected? Have the results been published in a report or the scientific literature?
- C. Minimum Data Submission: Ohio EPA is requesting only bacteria data (fecal coliform or *E. coli*) collected during the recreational season (May 1st to October 15th) from 2001-2005. The following information must be included in the data submission in an electronic spreadsheet or data base format:
- Sample collection date
 - Sample site location including water body name, county, river mile (if known), latitude/longitude (decimal degrees or degrees, minutes, and seconds)
 - Fecal coliform count (or *E. coli* count – beaches only)
 - Identification of units associated with bacteria counts
 - Contact name, address, telephone number, and e-mail address of the person submitting the data set
 - Identification of the laboratory performing the sample analysis
 - Weather conditions, flow, precipitation, and total suspended solids (all optional)

B.3 Web Page Announcing 2006 IR Preparation

2006 Integrated Water Quality Monitoring and Assessment Report

Preparation of 2006 Integrated Report is Underway

Ohio EPA is preparing the 2006 Integrated Report, which fulfills the State's reporting obligations under Sections 305(b) and 303(d) of the Federal Clean Water Act. The report will indicate the general condition of Ohio's waters and list those waters that are currently impaired and may require Total Maximum Daily Load (TMDL) development in order to meet water quality standards.



The report will follow [guidance released by U.S. EPA in July 2005](#). The [most recent Ohio Integrated Report](#) was completed on March 30, 2004.

Ohio EPA will continue to use the watershed based listing approach, first used in 2002. We will include data collected as recently as 2005 where possible. No significant changes in the methods for gauging impairment are expected. Major project milestones and dates for completion are:

Refine methodologies / compile data	September - November 2005
Prepare list / internal review	December 2005
Public notice draft 303(d) list	January 2006
Respond to comments / prepare final list	February - March 2006
Submit to U.S. EPA Region V for approval	April 1, 2006

Please continue to check this Web site for updates.

For more information, contact:

Trinka Mount
TMDL Coordinator
trinka.mount@epa.state.oh.us
(614) 644-2140

**B.4 Notice of Availability and Request for Comments FWPCA Section 303(d)
TMDL Priority List for 2006**

**OHIO ENVIRONMENTAL PROTECTION AGENCY
PUBLIC NOTICE**

**NOTICE OF AVAILABILITY and REQUEST FOR COMMENTS
FWPCA Section 303(d) TMDL PRIORITY LIST FOR 2006**

Notice is hereby given that the Ohio Environmental Protection Agency (Ohio EPA) Division of Surface Water (DSW) is providing for public review and comment the Total Maximum Daily Load (TMDL) priority list for 2006 as required by Section 303(d) of the Federal Water Pollution Control Act, 33 U.S.C. Section 1313(d). The list indicates the waters of Ohio which are currently impaired and may require TMDL development in order to meet water quality standards. The waters are ranked according to level of impairment to help indicate which have the greatest need for TMDL development. The list is contained within the *2006 Integrated Water Quality Monitoring and Assessment Report*, which in accordance with federal guidance, satisfies the Clean Water Act requirements for both Section 305(b) water quality reports and Section 303(d) lists. The report describes the procedure that Ohio EPA used to develop the list and indicates which areas have been selected for TMDL development during FFY 2006 through 2008.

A public information session will be held on February 8, 2006, at 2 pm at Ohio EPA's central office, located at 122 South Front Street, Columbus.

All interested persons wishing to submit comments for Ohio EPA's consideration may do so by email to trinka.mount@epa.state.oh.us, or in writing to Ohio EPA, Division of Surface Water, P.O. Box 1049, Columbus, Ohio 43216-1049 Attn: 303(d) Comments, by the close of business, February 20, 2006. Comments received after this date may be considered as time and circumstances permit. After consideration of comments, Ohio EPA will submit a final document to the United States Environmental Protection Agency (USEPA) for approval. The final report must be submitted to USEPA by April 1, 2006.

The report is available on Ohio EPA Division of Surface Water Web site at <http://www.epa.state.oh.us/dsw>. To receive a printed copy, contact the Ohio EPA - DSW reception desk by telephone at (614) 644-2001 and request the report by name. To arrange to inspect Agency files or records pertaining to the document, to ask technical questions regarding the list or report, or to request notice of when Ohio EPA submits the document to USEPA, please contact Trinkka Mount at the e-mail address above or by calling (614) 644-2140.

B.5 Public Comments and Responses to Comments

The draft 2006 Ohio Integrated Report was available for public review from January 20 through February 20, 2006. Comments were received from the parties listed in the following table:

Date	Author	Organization	Identifier
01/19/2006	Marilyn Ortt	Friends of the Lower Muskingum River	FLMR
01/20/2006	Robert McCall	OSU Extension	OSUE
02/02/2006	John Crumrine	Heidelberg College	HC
02/16/2006	Erwin Odeal	Northeast Ohio Regional Sewer District	NEORS
02/17/2006	Julie Frazier	Butler County Department of Environmental Services	BCDES
02/17/2006	Anthony Sasson	The Nature Conservancy, Ohio Chapter	TNC
02/20/2006	Michael Murray	National Wildlife Federation	NWF
02/21/2006	Dan Binder	Ohio Environmental Council	OEC

Comments are grouped by topic, as follows:

- B.5.1 General Comments
- B.5.2 Use of Fish Tissue Contamination Data
- B.5.3 Evaluation of Recreation Use
- B.5.4 Evaluation of Aquatic Life Use
- B.5.5 Miscellaneous Issues
- B.5.6 Monitoring Schedule: General
- B.5.7 Monitoring Schedule: Specific Watersheds
- B.5.8 Monitoring Emphasis
- B.5.9 Summary of Changes to Document between Public Review and Approval

Comments are identified by organization submitting the comment. Page numbers cited in comments are based on the draft report and may not be the same in the final version of the report. Copies of the comment letters and emails are provided in full at the end of this appendix.

B.5.1 General Comments

Comment: We greatly appreciate the effort that went into producing the report and the amount of high quality work needed to create it. The report recognizes that improvements in stream quality that can occur with hard work and good water quality management. The improvements in large river water quality are noteworthy and OEPA's efforts regarding TMDL monitoring is excellent and an important value for all Ohio. [OEC]

Comment: We are pleased to see that Ohio EPA included data collected by NEORS in the Draft 2006 Integrated Report as, according to Ohio EPA, NEORS data "meet the rigorous

QA/QC protocols necessary to meet Ohio EPA data quality objectives." We also appreciate the incorporation of changes based on our comments on the last integrated report. [NEORSD]

Comment: We greatly appreciate the effort that went into producing this report and the extensive amount and high quality of work needed to create the data it is based on. [TNC]

Comment: The report contains notable achievements and changes which the Conservancy would like to recognize. First, the improvements in stream quality show that persistent and extensive dedication to comprehensive water quality management actually will result in such improvements. The improvements in large river water quality are impressive. Ohio EPA's completion of TMDLs is outstanding, and Ohio is making real progress in attainment of Clean Water Act goals through this process. [TNC]

Comment: ... we appreciate the outstanding work Ohio EPA is doing and fully support continued and expanded efforts. We especially support efforts for expanded funding to allow the agency to more thoroughly monitor and analyze the state of Ohio's water resources. [TNC]

Response: The Agency acknowledges these positive comments.

B.5.2 Use of Fish Tissue Contamination Data

Comment: The draft list inappropriately excludes water bodies having fish consumption advisories from the category 5 (or TMDL) list. This is contrary to the listing guidance released by U.S. Environmental Protection Agency (EPA) in 2005, which states as follows:

"EPA generally believes that fish and shellfish consumption advisories and certain shellfish growing area classifications based on segment specific information demonstrate impairment of CWA section 101(a) "fishable" uses. This applies to fish and shellfish consumption advisories and certain shellfish area classifications for all pollutants that constitute potential risks to human health, regardless of the source of the pollutant. Furthermore, advisories based on the results from probability surveys or other predictive tools having a high degree of confidence (i.e., 95%) may also form the basis of listing segments as impaired. States, on their own prerogative, may choose to place segments into Category 5 (or on the section 303(d) list) using probability surveys when fish and shellfish consumption advisories and certain shellfish area classifications constitute potential risks to human health." (U.S. EPA, Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 29, 2005, P. 60).

Further, the guidance also states:

"While numeric human health criteria for ambient water column concentrations of pollutants are a basis for determining impairment, the attainment of such criteria does not always mean that designated uses are being protected." (U.S. EPA, 2005, *Op. Cit.*)

[NWF]

Response: As quoted in the original comment, U.S. EPA's "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act", July 29, 2005 (hereafter referred to as EPA's guidance) states that:

“While numeric human health criteria for ambient water column concentrations of pollutants are a basis for determining impairment, the attainment of such criteria does not always mean that designated uses are being protected.”

Ohio's rules lack explicit mention of sport-caught fish consumption as a designated use. Therefore, the only link between fish consumption and Ohio's rules are the human health water quality criteria, which were the basis of determining impairment due to fish consumption.

In addition, EPA's guidance states that **(emphasis added)**:

“For purposes of determining whether a segment is impaired and should be included on a section 303(d) list, EPA considers a fish or shellfish consumption advisory, a NSSP classification, and the supporting data, to be existing and readily available data and information that demonstrates nonattainment of a section 101(a) “fishable” use when:

- the advisory is based on fish and shellfish tissue data,
- a lower than “Approved” NSSP classification is based on water column and shellfish tissue data (and this is not a precautionary “Prohibited” classification or the state water quality standard does not identify lower than “Approved” as attainment of the standard),
- the data are collected from the specific segment in question, and
- **the risk assessment parameters (e.g., toxicity, risk level, exposure duration and consumption rate) of the advisory or classification are cumulatively equal to or less protective than those in the state's water quality standards.**

This applies to all pollutants that constitute potential risks to human health, regardless of the source of the pollutant. However, for fish/shellfish advisories for “dioxin and dioxin-like compounds”, due to unique risk characterization issues, listing decisions should be made on a case-by-case basis.

EPA acknowledges that in some cases, fish and shellfish consumption advisories may not demonstrate that a section 101(a) “fishable” use is not being attained in an individual segment. For example, a state may have issued a statewide or regional warning regarding fish tissue contaminated with a bioaccumulative pollutant, based on data from a subset of segments. **A state may use a higher fish consumption value in determining the need for an advisory compared to the value used in establishing water quality criteria for the protection of human health.** As noted above, a state may also classify shellfish growing areas “Prohibited” as a precautionary measure due to the proximity of wastewater treatment discharges or where a required sanitary survey has not been conducted. In such instances, these segments need not be listed as impaired under section 303(d) unless there are segment specific data (and the data were not considered during the development or review of a non-precautionary NSSP classification), showing non-attainment of section 101(a) uses.”

The water quality criteria assume a certain level of fish consumption as stated in the Great Lakes Water Quality Initiative and U.S. EPA's Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health, which is 15 grams of fish per day in the Lake Erie basin and 17.5 or 6.5 grams of fish per day in the Ohio River Basin, depending on when the criteria were implemented. Levels of fish consumption used in the advisories represent common units of time, such as a meal per week (32.6 grams per day) or a meal per month (7.6

grams per day). Therefore, the fish consumption level used in developing the “one meal per month” advisories is higher than the fish consumption level used in developing the water quality criteria. We believe this falls under the EPA guidance section quoted above as a case where fish advisories do not demonstrate that a section 101(a) “fishable” use is not being attained in an individual segment.

Comment: OEPA notes that different methodologies are used in its derivation of water quality criteria for protection of human health and the Ohio Department of Health derivation of fish consumption advisory thresholds (Ohio EPA, Ohio 2006 Integrated Water Quality Monitoring and Assessment Report, p. 42). However, the agency inexplicitly considers that the water quality criteria thresholds are more appropriate in listing decisions than the presence of a fish consumption advisory on a specific water body (with water body specific data). This is clearly contrary to U.S. EPA guidance, which notes that:

“Although the CWA does not explicitly direct the use of fish and shellfish consumption advisories or NSSP classifications to determine attainment of water quality standards, states are required to consider all existing and readily available data and information to identify impaired segments on their section 303(d) lists.” (U.S. EPA, 2005, *Op. Cit.*, p. 61)

[NWF]

Response: As stated in our methodology, we considered all existing and readily available fish contaminant data in identifying impaired segments. Those data are the exact same data as were used in developing fish consumption advisories. We did not consider water quality criteria thresholds “more appropriate” in list listing decisions than the presence of a fish consumption advisory, but rather we used criteria thresholds because they are linked to our rules, whereas advisories are not based on our rules.

Comment: In fact, concerning fish consumption advisories, OEPA states:

“Ohio EPA’s 2006 IR uses fish contaminant data to determine impairment using the human health based water quality criteria. Fish consumption advisories (FCAs) were not used in determining impairment status. However, the public should use the FCAs in determining the safety of consuming Ohio’s sport fish.” (Ohio EPA, Ohio 2006 Integrated Water Quality Monitoring and Assessment Report, p. 42)

This is quite puzzling, in that it argues (implicitly) that the data used in establishing fish consumption advisories is sufficient for the public to make decisions about protecting their health, but not sufficient for the state to recognize that further efforts are needed to address these water bodies in order to ensure that they are meeting water quality standards (which include protection of human health). The rationale offered by Ohio EPA (Ohio EPA, 2006, P. 50-51) is definitely not consistent with a public health approach, which would argue that the more protective threshold should drive impairment identification and thus restoration targets. Though our focus is on mercury contamination, this argument applies equally to all chemicals for which fish consumption advisories exist in Ohio (including polychlorinated biphenyls). It seems clear that the data used in establishing fish consumption advisories in Ohio meet the standards identified in U.S. EPA guidance, and thus these waters must be listed as requiring TMDL restoration plans under the Clean Water Act. [NWF]

Response: The fish consumption values used in the water criteria calculations are intended to reflect actual levels of fish consumption by the public. The fish consumption values used in the advisory calculations are meant to give the public a practical measure of how often they can safely eat sport-caught fish, and are not meant to be indicative of actual consumption practices. Water quality criteria are designed to protect the public from fish contaminants; fish consumption advisories are designed to inform the public to make educated choices regarding fish consumption. Therefore, we believe that by using water quality criteria calculations in determining impairments, we are protecting human health.

Comment: In the Draft 2006 Integrated Report, the methodology for determining impairments for fish tissue contaminant data has been modified from that of the 2004 Integrated Report. The 2004 Integrated Report indicated that fish and shellfish consumption advisories could be an impairment of the Section 101(a) "fishable" use. In the 2006 Integrated Report, "The evaluation of fish tissue contaminant data has been totally uncoupled from the fish consumption advisories. The revised methodology directly compares the data to the human health based water quality criteria." While we support the proposal of separating water quality criteria impairments and fish consumption advisories, we remain apprehensive.

As the quantity of low-level mercury data increases, it is progressively apparent that compliance with mercury effluent limits for Great Lakes basin dischargers is technically infeasible. In order to comply with NPDES permits, NEORSD (and other dischargers) will need to apply for and obtain variances from water quality based mercury effluent limits. According to Ohio Administrative Code paragraph 3745-33-07 (D) (8), "Reasonable progress shall have been made in the development of a TMDL implementation plan prior to renewing variances approved under paragraph (D) (9) or (D) (10) of this rule."

On June 18, 2004, NEORSD filed an appeal with the Environmental Review Appeals Commission indicating that a regional TMDL for mercury in Ohio's 2004 Integrated Report is necessary to fulfill this requirement. While the methodology for determining impairment has changed with the 2006 Integrated Report, the need for a regional TMDL for mercury still exists. Therefore, NEORSD's position on this issue has not changed with the 2006 Draft Integrated Report, and comments submitted by NEORSD on the 2004 Draft Integrated Report remain relevant in this regard.

In particular, NEORSD's comments recommend an approach utilizing fish tissue data to evaluate attainment of both Ohio's applicable wildlife and human health criteria for mercury. Ohio EPA's response to this recommendation was that, "The [NEORSD's] suggested approach of multiplying the criterion by trophic-level specific bioaccumulation factors has a higher degree of uncertainty because of the uncertainty in determining bioaccumulation factors."

In fact, because bioaccumulation factors are already incorporated into the denominators of the ambient water quality criteria for mercury, the NEORSD suggested approach actually has the effect of removing the bioaccumulation factors from the evaluation and therefore removing this source of uncertainty. If Ohio EPA lacks confidence in the bioaccumulation factors already in use the Agency should adopt this approach, as it allows a direct assessment of the levels of concern unimpeded by bioaccumulation factors.

Ultimately, we believe that the expressed lack of confidence in bioaccumulation factors should prompt the Agency to reassess the validity of the existing water quality criteria, which rely on them. [NEORS]

Response: In developing a methodology regarding fish tissue data usage in the 2006 Integrated Report, the Agency was concerned primarily with the effect of contaminant concentrations on human health, not just with the water column concentration of contaminants. The Agency recognizes the difference between the approach used in the 2006 Integrated Report using the Reference Dose and fish consumption levels found in the human health water quality criteria to determine impairment status, and the approach suggested by NEORS, which uses bioaccumulation factors to determine if water column contaminant levels are meeting the human health water quality criteria.

After considering the pros and cons of each approach, the Agency believes the fish tissue data evaluation methodology as presented in the 2006 Integrated Report is appropriate and protective of human health. The Agency recognizes that the methodology suggested by NEORS may have merit and will further consider it when the 2008 Integrated Report is prepared. The Agency is also considering revising the water quality standard rules to reflect the fact that safe consumption of fish by humans should be an endpoint considered in its water quality standards.

Regarding the use of wildlife criteria in evaluating fish tissue data for the Integrated Report, the Agency is still attempting to determine if the water column concentration is an appropriate endpoint for determining impairment status. The Agency will evaluate how the other Great Lakes States are dealing with wildlife criteria in their Integrated Reports and determine a future course of action for the 2008 Integrated Report.

Regarding the variance and mercury effluent limits aspect of this comment, Ohio EPA acknowledges that the Agency has received variance requests from dischargers in the Lake Erie Basin, mostly from those discharging to small streams. We expect the number of variance requests to increase as the November 2010 mixing zone phase-out deadline approaches. The variance rule does include the cited clause; however, we are investigating possible rule changes that would eliminate the TMDL-progress requirement and substitute a pollutant minimization plan progress requirement. This would probably negate the need for a regional mercury TMDL. At the same time, we are also closely following mercury-related activities in other states, for example, Minnesota's regional mercury TMDL.

B.5.3 Evaluation of Recreation Use

Comment: The standards found in OAC 3745-1-07 for primary contact recreation for fecal coliform state that the "geometric mean fecal coliform content (either MPN or MF), based on not less than five samples within a thirty-day period, shall not exceed 1,000 per 100 ml and fecal coliform content (either MPN or MF) shall not exceed 2,000 per 100 ml in more than ten percent of the samples taken during any thirty-day period." Attainment status for rivers and streams in the report was not based on this standard. Lack of data precludes the use of the standard, and attainment determinations were made based instead upon whether the 75th percentile exceeded 1,000 per 100 ml or whether the 90th percentile exceeded 2,000 per 100 ml. These determinations lack any basis in the State's rules. [NEORS]

Response: While there are differences in the way bacteria data were aggregated for the purpose of statistical analysis in the Integrated Report compared to the wording of the bacteria criteria found in the water quality standards rules (as acknowledged in the methodology section of the Integrated Report), the methodology employed does in fact have a strong basis in the water quality standards rules.

The Agency used fecal coliform and E. coli bacteria data in its analysis of recreational use attainment. These are the same indicator bacteria that are used within the water quality standards rules to protect the recreational beneficial use designation. Also, only ambient data collected during the recreation season were used, since the bacteria criteria only apply during the recreation season. Furthermore, use of the 90th percentile is tied to the fact that water quality standards allow an exceedance of 2,000 fecal coliform per 100 ml in only ten percent of the samples collected within a thirty day period. Exceedance of the 90th percentile value accounted for nearly all of the recreational use impairment determinations. Finally, the numeric threshold values used in the Integrated Report are identical to the numeric values for the bacteria indicators used in the statistical analysis (E. coli for Lake Erie and fecal coliform for inland water bodies).

The Agency acknowledges the fact that compilation of data occurred over multiple years, and is aggregated from multiple water bodies within a particular assessment unit. Given that the analysis is for a watershed scale rather than an individual water body or particular site location, the Agency believes that the methodology implemented in the assessment of recreation use attainment has strong ties to the water quality standards.

The Agency does expect changes to the water quality standards regarding the recreational use in the future. Any changes that are made will seek to provide even stronger ties between the water quality standards and recreational use assessment determinations in future integrated reports.

B.5.4 Evaluation of Aquatic Life Use

Comment: BCDES conducted biological studies of the East Fork of the Mill Creek in the years 2000, 2002, and 2003 following stream restoration projects. We have previously furnished our data to OEPA and BCDES requests that OEPA define how data such as that obtained by our studies could be included in the aquatic life use assessment portion of this report to reflect partial attainment. [BCDES]

Response: Thank you for pointing out the oversight. We have updated the Mill Creek assessment to incorporate the monitoring data collected by BCDES in 2003. Assessment unit statistics in Appendix E.2 (p. 324) now reflect the presence of partial attainment at sites in the vicinity of the Butler County Upper Mill Creek WWTP.

B.5.5 Miscellaneous Issues

Comment: In Appendix E.3, for the Cuyahoga River Mainstem (downstream Brandywine Creek to the mouth, including the old channel), the sampling years are listed as 1996-2004. This implies that sampling was conducted every year during this period. However, the 2004

Integrated Report indicates that sampling did not occur every year in this time period. The current report should clarify the years monitoring was conducted. [NEORS]

Response: The report has been changed to reflect the actual years for which data are available and have been used in the mainstem assessment.

Comment: The Great Miami and associated tributaries are poised for remarkable restoration efforts from a variety of activities. The nutrient trading program recently piloted by the Miami Valley Conservancy District suggests that important restoration could be in the offing for the Miami valley tributaries. As such a removal of a section of the Sevenmile Creek from impaired to warmwater use designation may not go far enough to demonstrate the local conditions. The upper reaches are exceptional warmwater use designation as is the lower section of this waterway. As such warmwater use may not be sufficient to represent the existing use that is currently being met. If a use attainability analysis is undertaken for this waterway there may be cause to upgrade the portion of Sevenmile being removed from impaired to exceptional warmwater like the stream way sections that bracket the concern area. This could be a good opportunity to capture a significant improvement and solidify restoration efforts in the region. [OEC]

Response: As part of the 2002 intensive survey conducted within the Sevenmile Creek watershed, Ohio EPA extensively reviewed, evaluated, and recommended appropriate aquatic life uses. Based on this assessment, it was determined that the existing and field-verified Warmwater Habitat (WWH) use designated for the upper reach of Sevenmile Creek was appropriate and should be retained. By protocol, Ohio EPA performs a use attainability analysis in order to justify less than Clean Water Act goal uses (i.e., Modified Warmwater Habitat (MWH) and Limited Resource Water (LRW)). Additionally, Ohio EPA performs a similar assessment to justify a higher tier designation such as Exceptional Warmwater Habitat (EWH) or Coldwater habitat (CWH). These higher tier designations can not made on the potential to attain but require substantial proof of actual attainment by the aquatic communities.

In the case of Sevenmile Creek, such as assessment was performed to determine whether or not the new data should trigger any aquatic life use changes. For both the lower EWH reach and upper WWH reach, it was determined that no change be made at this time. For the upper reach to be redesignated as EWH, protocol requires that the EWH biocriteria be fully and solidly attained by both fish and macroinvertebrates at a preponderance of the monitored sampling locations. While macroinvertebrates performed at and above EWH at most sites, fish were only marginally achieving the Index of Biotic Integrity (IBI) biocriterion at several sites and the Modified Index of Well Being (MIwb) biocriterion was not met at half the sites and only marginally met at most others. Accordingly, it was determined that requirements for EWH redesignation based on 2002 survey data were not met.

Comment: I cannot seem to find TMDL priority list for 2006 on the website. [FLMR]

Response: The report was posted on the web page late in the afternoon of January 19, in advance of the official public notice date (January 20) cited in the public notice. Due to publishing schedules, notices sometimes appear in newspapers before the commencement of the public review period.

Comment: Page 60 of the document - Table 5-1 lists four 11-digit HUCs within the Blanchard. Which one is ...001 sub-shed? Are you indicating that the entire 8-digit HUC falls under the impairment? Or is that a new number now identifying the Drinking Water Reservoir? Other ...001 sub-sheds are listed that way too. [OSUE]

Response: The 001 notation is not part of an official numbering system but is merely a "tag" that Ohio EPA uses to keep track of the large river assessment units (AUs) in the database. Thus, the 001 refers to the Blanchard large river assessment unit. We should have changed "001" to "mainstem" prior to releasing the report. Tables 5-1 and 5-2 have been corrected in the final report.

Comment: Page 95 of the document - Table 6-6. Short-term schedule for TMDL development. AU "Riley Creek" should indicate it is from the Blanchard River. [OSUE]

Response: Riley Creek certainly is part of the Blanchard project. As presented in the draft report, Table 6-6 was simply a listing of assessment units to be covered with TMDLs as needed; connections among the units were not indicated. However, the suggestion would make the table more useful to the reader and the final report has been changed to indicate such connections.

Comment: Really glad you were able to get the Blanchard River AUs in this report year.

Response: Note that only the bacteria data from the Blanchard is included in the report; the biological data takes longer to process and isn't yet available. The 2008 Integrated Report will include the additional data. Of course, the Blanchard watershed data collected in 2005 will be available for the TMDL and local discussion of any needed restoration options.

Comment: I can not locate or find definitions for the rankings of 1 through 5, including 4A, etc. Where should I look? [HC]

Response: The definitions are in Section 6.1.1, on page 79 of the draft report.

Comment: BCDES wishes to point out an inconsistency between the draft OEPA 2006 Integrated Report and two previously approved EPA documents. In Appendix E.2 Watershed Assessment Unit (WAU) Results for Mill Creek 05090203 010 (page E.2-324 in the 2006 draft), the next scheduled monitoring is listed as due in the year 2020.

OEPA's Total Maximum Daily Loads (TMDL) for the Mill Creek Basin prepared by OEPA's Division of Surface Water (approved in April 26, 2005 by USEPA) indicates that OEPA will sample the Mill Creek WAU in 2012 and 2015 at river miles 0.8 and 0.3 as referenced in Table 2. Additionally, based on OEPA's 2004 Integrated Report the next scheduled monitoring is due in the year 2012 and, as part of the February 14, 2006 draft NPDES permit and fact sheet for the Upper Mill Creek WRF, Ohio EPA has attached OEPA's approved 2004 Integrated Report.

BCDES recommends that the next monitoring date listed in Appendix E in the draft 2006 Integrated report be changed to the year 2012 to be consistent with previously published and approved EPA documents. BCDES is relying on Ohio EPA to conduct the biological monitoring as outlined in the approved TMDL implementation schedule prior to making significant – millions of dollars – investments in additional nutrient removal improvements. [BCDES]

Response: Ohio EPA is committed to complete the sampling described in the approved TMDL. However, the monitoring date of 2020 is a projection of when Ohio EPA may be able to return to the watershed for a full watershed assessment. The comment section of the Mill Creek summary sheet in Appendix E.2 has been changed to note the 2012/2015 monitoring commitment.

Comment: BCDES appreciates the more detailed list of impairment sources under the WAU Comments section in the 2006 draft. This section states that additional TMDL work or other paths to attainment of Water Quality Standards will be needed to remove the Mill Creek assessment unit from its impairment listing. As mentioned in previous comments to Ohio EPA, BCDES is concerned that the TMDL does not currently reflect, nor has OEPA set out a plan, to address all the sources of impairment and that the burden will continue to fall on the Upper Mill Creek treatment plant to undergo potentially unnecessary capital investments. [BCDES]

Response: Ohio EPA is currently working in more than 100 other assessment units across the State of Ohio to complete TMDLs, and many others have yet to begin. The approved Mill Creek TMDL addresses nutrients; Ohio EPA acknowledges that not all of the impairing causes are addressed in the TMDL. However, actions recommended in the TMDL to reduce nutrients should have a beneficial effect on other impairment causes.

In many ways, Ohio EPA remains active in the watershed. The 319 program continues to work closely with the watershed groups in Mill Creek, especially in the upper portion of the watershed where they have received funding. In addition, funds generated through enforcement action against the Cincinnati Metropolitan Sewer District are being used in Mill Creek to make water quality improvements. We continue to work with the Cincinnati Metropolitan Sewer District on long-term control plan issues.

We urge BCDES to continue to work with its watershed partners and local 208 planning agency to incrementally address the remaining impairments in the Mill Creek watershed in advance of future TMDL activity.

B.5.6 Monitoring Schedule: General

Comment: According to the Surface Water Program Summary, the Five-Year Basin Approach for water quality monitoring by watershed was established in order to support water quality management activities such as the re-issuance of NPDES permits and revisions to Ohio's water quality standards. As this program has not been fully funded, the five-year monitoring cycle takes more than ten years to complete. Watersheds within the NEORS service area are now scheduled for monitoring between 2014 and 2021. If Ohio EPA sampling occurs as scheduled, it is possible that twenty years will pass between assessments on some watersheds. As data older than ten years cannot be used to determine attainment, there may be a period of ten years

or more where attainment status of area watersheds will not be known. Any improvements or degradation in water quality that take place during this time period may go unnoticed and/or undocumented. They could thus be excluded from consideration in the NPDES permitting decisions which continue to be made in five-year cycles. [NEORS]

Comment: Section 6.4.2 addresses "Long-Term Schedules for Monitoring and TMDLs" (Total Maximum Daily Load). We encourage the Agency to develop more frequent monitoring in order to provide more up to date analyses. Greater frequency could help determine effectiveness of stormwater practices, detect problems, and make corrections.

Many watersheds need more frequent efforts, especially those that are high quality, such as those designated Exceptional Warmwater Habitat, Coldwater Habitat, and Outstanding State Waters. Several of these are in rapidly developing watersheds regulated under the NPDES Phase II stormwater program, and threats and degradation are imminent. Change, often detrimental, could easily occur much more rapidly than the 20 year TMDL cycle. For example, the Big Darby Creek, lower Grand River, lower Little Miami River, and lower Olentangy River are all experiencing growth impacts, and monitoring needs to be done on a frequent basis to help avoid more degradation.

Therefore, we ask the Agency to schedule these watersheds' TMDL work on a much more frequent basis approaching five years, and certainly less than ten. [TNC]

Comment: OEC encourages the Agency to examine what resources would be needed to provide more frequent monitoring than the draft report suggests. Greater frequency could help determine whether best management practices are yielding good results or if additional measures are needed. For example, the Big Darby Creek, the Grand River, the Little Miami River, and the Olentangy River (in Delaware County) are all experiencing strong growth and monitoring may need to be done on a more frequent basis to help describe if degradation continues. We suggest that monitoring that is more frequent than the report outlines may be needed in these rapidly urbanizing areas. [OEC]

Response: We understand the concern about the length of time between major watershed surveys and the value of data in documenting change. Our intent in creating and publishing the schedule was to inform the public of our monitoring plans in an effort to be transparent about our resources and how they will be used.

It is important to note that the monitoring schedule is a projection – more set for the near term and less set for later years. The schedule can change for any number of reasons, including loss or gain of Ohio EPA resources. The schedule assumes that today's level of monitoring would continue into the future. Currently the Division of Surface Water invests approximately \$6 million of its \$30 million budget into water quality monitoring and TMDL activities. Other important activities of the Division are described in Section 3.1 of the 2006 Integrated Report.

The schedule was crafted using the steps outlined below. The "Five-Year Monitoring Plan" provided a framework for the schedule because retaining the basin approach is important for balancing work and supporting other programs within Ohio EPA.

1. Completing a first round of monitoring for all watersheds was given primary importance. This approach seems prudent in light of both litigation regarding pace of TMDL development and Ohio EPA's state-wide responsibility.
2. Among watersheds not already being addressed by recent monitoring and TMDLs, several factors were examined, including the following:
 - amount of impervious surface
 - presence of high-value attributes
 - presence of public drinking water supply intakes
 - degree of impairment (impairment rank)
 - likelihood of change (population growth)
 - presence of major basin initiatives led by others (for example, the Muskingum work of the U.S. Army Corps of Engineers, the Scioto CREP, the Maumee RAP).It will take about two monitoring cycles (10 years) to complete the first round of monitoring.
3. Watersheds already addressed by recent monitoring and TMDLs were scheduled after the unexamined watersheds (third and later cycles).

As there are indications of improvements in TMDL areas, we will revisit to measure current conditions. We have already done this in areas of the Cuyahoga River where changes were made in response to Ohio's first TMDL. Changes in other watersheds may not be so dramatic in such a short timeframe. We did not include these "revisits" in the schedule because they are difficult to plan for in advance, although we anticipate that in three to five years, as much as 25% of our monitoring resources may be redirected to this activity. Such monitoring will be arranged to answer the question being posed and may not include the basin-wide structure typically used to create TMDL plans. As more of this "revisit" work is needed in response to restoration actions, we expect that future schedules (e.g., in the 2008 Integrated Report) will reflect the impact of resources redirected for this purpose.

Ohio EPA makes every effort to stretch monitoring and TMDL resources by taking advantage of opportunities to work with others. When suitable opportunities arise, we adjust the monitoring schedule to participate. Examples of such efforts include moving ahead the monitoring and TMDL for the Monday Creek watershed to work with the Corps of Engineers and ODNR, monitoring adjustments to support baseline studies for the Scioto River CREP (Conservation Reserve Enhancement Program), and adjustments to support the Maumee River RAP (Remedial Action Plan). In all of these cases, however, there were no increases in resources, so other scheduled projects were displaced on the schedule (i.e., moved to a later date).

B.5.7 Monitoring Schedule: Specific Watersheds

Muskingum River

Comment: I would like to go on record along with Friends of Lower Muskingum River as advocating the Muskingum be elevated on the priority list - perhaps for 2007. The size of the watershed and the amount of human contact and fish consumption from it would seem to be sufficient to place it on a high priority list. [FLMR]

Response: Ohio EPA will be collecting fish tissue from the entire Muskingum River for the purpose of contaminant analyses in the summer of 2006. Raw data from these collections should be available by July 2007, and the data will be evaluated for the purpose of fish consumption advisory modifications and publicized no later than March 2008.

In addition, Ohio EPA is trying to put together the resources to accomplish a traditional physical, chemical, and biological monitoring survey of the entire Muskingum River mainstem in 2006. The Ohio River Valley Water Sanitation Commission (ORSANCO) Regional Environmental Monitoring and Assessment Program (REMAP) project is providing some monitoring of the river, and supplemental work by Ohio EPA would result in a full survey. Details will not be worked out in time to meet the submittal deadline for this report, so the “next scheduled monitoring” date here will remain as 2013. If the 2006 monitoring is completed, the monitoring schedule in the 2008 Integrated Report will be adjusted (in fact, the 2008 report could reflect at least some of the findings of any 2006 monitoring).

Comment: We appreciate the agency's scheduling of field monitoring in the Muskingum River basin watersheds in 2007, especially the Kokosing River and Mohican River watershed. This effort is important to support the proposed Muskingum Basin Initiative (<http://www.muskingumbasin.org/initiative/>) of the U.S. Army Corps of Engineers and other agencies, where baseline data and analysis is needed to determine the outcome of any investment in stream improvements. [TNC]

Response: Ohio EPA acknowledges the comment and looks forward to continued involvement in the Muskingum Basin Initiative.

Scioto River

Comment: Although not covered in the 2006 report, we thank the agency for its cooperation with the Ohio River Valley Sanitation Commission (ORSANCO) in completing fish and macroinvertebrate work on the lower Scioto River. We look forward to seeing the report covering the results of this sampling. This effort should help assess the effectiveness of the \$207 million Scioto Conservation Reserve Enhancement Program (CREP). We would also appreciate any further efforts to increase Scioto basin monitoring to support the Scioto CREP. [TNC]

Comment: Although not covered in the 2006 report, we suggest that the schedule for this very large basin should occur sooner than the report outlines, if possible. Several indications suggest that the Scioto River below Columbus may be rebounding to a higher use designation than it currently has. The improvements to the waste water problems of Columbus and the \$200 million Scioto Conservation Reserve Enhancement Program (CREP) may play an important role in heightening these improvements. Therefore any effort to increase Scioto basin monitoring could help support and document these likely improvements. [OEC]

Response: Over the past few years, Ohio EPA has made significant changes to its monitoring schedule to accommodate baseline studies for the Scioto CREP. TMDLs for most of the upper watershed are approved or underway (Mill Creek, Bokes Creek, Big Walnut Creek, Big Darby Creek, Olentangy River). In addition, new monitoring in areas south of Columbus has been significant (Walnut Creek and Salt Creek in 2005, and Paint Creek and Scioto Brush Creek in 2006). Some improvements downstream of Columbus were documented in previous studies and more improvement is expected. Given needs in other areas of the State, Ohio EPA may not be able to accommodate additional sampling in the Scioto watershed beyond that outlined in the 2006 Integrated Report. However, we will continue to look for additional resources for monitoring and identify opportunities to cooperate with others, such as ORSANCO.

Grand River

Comment: While the upper Grand River is scheduled for field monitoring in 2009, we ask that this monitoring be rescheduled for 2007 to better support and coordinate with the Watershed Action Plan underway in the watershed, and to match more closely with the lower Grand River monitoring conducted in 2004. Also, in 2005, The Nature Conservancy conducted cool-water species surveys in many streams in the watershed. Our analysis suggests that many tributaries, including Trumbull Creek and Crooked Creek, have characteristics that would qualify them as Coldwater Habitat. These streams potentially support Exceptional Warmwater Habitat as well and should have a proper Ohio EPA survey to set proper use designations. [TNC]

Response: After discussing the merits of the comment and Ohio EPA's ongoing TMDL activities in the lower Grand River, we have decided to move the upper Grand monitoring to 2007. This change will require delaying the monitoring in the Killbuck Creek watershed from 2007 to 2009.

B.5.8 Monitoring Emphasis

Dam Removal

Comment: Recently, Ohio EPA successfully documented the stream quality improvements resulting from the Kent dam on the Cuyahoga River. Other dams are proposed for removal, or have recently been removed. The Conservancy encourages Ohio EPA to work closely with ODNR to evaluate needs for further dam removal, and more extensively evaluate those that are or recently have been removed. Results should be reported as part of the next Integrated Report. [TNC]

Comment: Ohio EPA has documented the stream quality improvements resulting from the Kent dam on the Cuyahoga River. Other dams are proposed for removal, or have recently been removed. OEC encourages Ohio EPA to work closely with ODNR and watershed coordinators working on TMDL concerns to evaluate needs for further dam removal, and more extensively evaluate those that are or recently have been removed. [OEC]

Response: Ohio EPA has consulted extensively with ODNR on the possibility of removing or modifying dams as a mechanism to improve water quality. In addition to the Cuyahoga work, we are currently monitoring dam removal work on the Olentangy River. As part of our ongoing monitoring studies across the state, we will continue to identify dams that present a barrier to water quality standards attainment. As resources allow, we will provide follow-up monitoring after dams are removed to document changes.

Hydromodification

Comment: The Conservancy is aware of the considerable need to modify the flow regime of dams so that streams below these dams can attain more natural conditions and improve aquatic life reproduction, survival and community structure. To date, Ohio has not had extensive practice modifying flow regimes below dams. Ohio EPA does not extensively address this major opportunity in its work or this report. We strongly encourage Ohio EPA to work with other agencies to address this opportunity and include such analyses in future Integrated Reports. If fully implemented, this is another area where Ohio could show major improvements effectively and efficiently. The Nature Conservancy has begun working with dam operators to modify how

and when water is released in order to restore and protect hundreds of river miles and thousands of associated acres of land and wetlands. The largest such effort is the Sustainable Rivers Project, a collaboration between The Nature Conservancy and the U.S. Army Corps of Engineers. Further information is at <http://www.freshwaters.org/eswm/sustrivs/>. [TNC]

Response: We acknowledge the comment and will be investigating the possibilities presented by the Sustainable Rivers Project.

Comment: Considerable concern with potential (and real) conflict is arising as drainage needs are becoming more serious in rural areas under going development. Existing maintained stream ways (often called ‘ditches’) in many cases have not been modified (or maintained) for many years. In some cases these stream ways have reclaimed warmwater use designation but are nonetheless scheduled for “dipping” a euphemism for dredging out the streams and denuding the banks. These streams, in some cases (e.g., Bee Run) have become fully functional natural streams and should be protected to a standard that is established in Clean Water Act law that protects existing uses. These “petition ditch” projects should receive environmental review by OEPA in conjunction with appropriate review by ODNR. [OEC]

Response: Ohio EPA acknowledges the comment. The Agency is one of many participants in an ongoing review of agricultural drainage practices by the Rural Drainage Advisory Committee, being facilitated by the Ohio Department of Natural Resources. This advisory committee is made up of a broad group of stakeholders and has been tasked to provide guidance regarding drainage improvement projects and environmental protection.

Special Species Analysis

Comment: Mussels are in decline throughout much of Ohio. Many species are declining, threatened or endangered. This trend contradicts other improvements covered in this report. The lack of adequate attention to this problem is an outstanding shortcoming of the analysis of aquatic life conditions. Working with the Ohio State University Museum of Biological Diversity, ODNR and other agencies, we request that Ohio EPA initiate a review in the Integrated Report that assesses the health and trends of the mussel community, and focuses attention on ways to reverse this trend throughout your work. [TNC]

Comment: While not explicitly protected in the provisions of the primacy authority for Clean Water Act protection the Ohio Administrative Code, Section 3745-1-05 lists endangered fish. We suggest that rare mussel species be given similar elevated notice. [OEC]

Comment: The Ohio Administrative Code, Section 3745-1-05, Table 5-2, lists declining fish species in Ohio. Like mussels, these species are obviously in trouble, and as part of the State of Ohio obligation under the Clean Water Act to protect these and other rare species, we ask for review similar to that described above for mussels. [TNC]

Response: Ohio EPA agrees that mussels are a group of special interest and deserve added attention in our monitoring effort. We are making special efforts to address mussel issues in our routine monitoring surveys in watersheds where populations are distinctly diverse and/or imperiled. A good example is the Big Darby watershed report (<http://www.epa.state.oh.us/dsw/documents/BigDarbyTSD2004.html>) which included a

thorough, detailed discussion of mussels and their plight in that watershed. We will continue to pay particular attention to mussel populations in future watershed surveys and report in detail on their status via the watershed report.

For the 2008 Integrated Report, if deemed a valued and necessary contribution, we will consider inclusion of a special statewide mussel status and assessment update prepared in collaboration with state mussel experts. We will also investigate the feasibility of updating Ohio's Antidegradation Rules (OAC Chapter 3745-1-05, specifically Tables 5-2 and 5-3) and revising the list of threatened and declining species based on the most recent listings of state and/or federal endangered, threatened, or special interest species from the Ohio Department of Natural Resources, Division of Wildlife and the U.S. Department of the Interior, Fish and Wildlife Service.

B.5.9 Summary of Changes to Document between Public Review and Approval

In addition to changes based on comments (outlined in previous sections), the following changes were made in the final report:

1. Various wording clarifications, per comments or proofreading.
2. Updated information provided by external party for Leading Creek assessment unit (05030202 090).
3. Further examination of bacteria data for Raccoon Creek revealed that the age of the data exceeded 10 years and would thus be considered "aged." As a result, the stream moved from category 1 to category 2.
4. A comment from U.S. EPA resulted in a category change (from category 4B to category 5) for two assessment units: Ohio River tributaries (downstream 8-digit divide to upstream Ohio Brush Creek) (05090201 010) and Todd Fork (upstream East Fork Todd Fork to mouth) (05090202 080). U.S. EPA discusses this change in their "Decision Document for the Approval of Ohio's Submission of the State's Integrated Report with Respect to Section 303(d) of the Clean Water Act (Category 5 Waters)."

Copies of comment letters and emails, in order received.

From: "Marilyn Ortt" <marilynortt@charter.net>
To: <trinka.mount@epa.state.oh.us>
Date: 1/18/2006 6:49:52 PM
Subject: TMDL

I cannot seem to find TMDL priority list for 2006 on the website. I would like to go on record along with Friends of Lower Muskingum River as advocating the Muskingum be elevated on the priority list perhaps for 2007. The size of the watershed and the amount of human contact and fish consumption from it would seem to be sufficient to place it on a high priority list.

Thank you for considering our comment.
Marilyn Ortt

From: Robert McCall <rmccall@postoffice.ag.ohio state.edu>
To: <trinka.mount@epa.state.oh.us>
Date: 1/20/2006 11:07:40 AM
Subject: Comments on Integrated Report

Hi Trinka,
Haven't read the report in full but as I have done a cursory scan I do have a couple of comments/questions.

1. Page 60 of the document Table 5 1 lists four 11 digit HUC's within the Blanchard. Which one is ...001 sub shed? Are you indicating that the entire 8 digit HUC falls under the impairment? Or is that a new number now identifying the Drinking Water Reservoir? Other ...001 sub sheds are listed that way too. Just curious.
2. Page 95 of the document Table 6 6. Short term schedule for TMDL development. AU "Riley Creek" should indicate it is from the Blanchard River.

Really glad you were able to get the Blanchard River AU's in this report year. I'll try to go through the document more in depth later on.

Thanks,
Robert

From: "John P. Crumrine" <jcrumrin@heidelberg.edu>
To: <trinka.mount@epa.state.oh.us>
Date: 2/2/2006 4:48:52 PM
Subject: 2006 Draft Integrated W.Q. Monitoring and Assessment Report

Trinka,

I can not locate or find definitions for the rankings of 1 through 5, including 4A, etc. Where should I look?

John Crumrine
Agricultural Project Coordinator
National Center for Water Quality Research, Heidelberg College

February 16, 2006

Ohio EPA
Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216-1049
Attn: 303(d) Comments
c/o: Ms. Trinka Mount, TMDL Coordinator

Re: Draft 2006 Integrated Water Quality Monitoring and Assessment Report

Dear Ms. Mount:

The Northeast Ohio Regional Sewer District (NEORS D) would like to offer the following comments on the Draft 2006 Integrated Water Quality Monitoring and Assessment Report. We are pleased to see that Ohio EPA included data collected by NEORS D in the Draft 2006 Integrated Report as, according to Ohio EPA, NEORS D data “meet the rigorous QA/QC protocols necessary to meet Ohio EPA data quality objectives.” We also appreciate the incorporation of changes based on our comments on the last integrated report.

Fish Contaminant Data

In the Draft 2006 Integrated Report, the methodology for determining impairments for fish tissue contaminant data has been modified from that of the 2004 Integrated Report. The 2004 Integrated Report indicated that fish and shellfish consumption advisories could be an impairment of the Section 101(a) “fishable” use. In the 2006 Integrated Report, “The evaluation of fish tissue contaminant data has been totally uncoupled from the fish consumption advisories. The revised methodology directly compares the data to the human health based water quality criteria.” While we support the proposal of separating water quality criteria impairments and fish consumption advisories, we remain apprehensive.

As the quantity of low-level mercury data increases, it is progressively apparent that compliance with mercury effluent limits for Great Lakes basin dischargers is technically infeasible. In order to comply with NPDES permits, NEORS D (and other dischargers) will need to apply for and obtain variances from water quality based mercury effluent limits. According to Ohio Administrative Code paragraph 3745-33-07 (D) (8), “Reasonable progress shall have been made in the development of a TMDL implementation plan prior to renewing variances approved under paragraph (D) (9) or (D) (10) of this rule.”

On June 18, 2004, NEORSD filed an appeal with the Environmental Review Appeals Commission indicating that a regional TMDL for mercury in Ohio's 2004 Integrated Report is necessary to fulfill this requirement. While the methodology for determining impairment has changed with the 2006 Integrated Report, the need for a regional TMDL for mercury still exists. Therefore, NEORSD's position on this issue has not changed with the 2006 Draft Integrated Report, and comments submitted by NEORSD on the 2004 Draft Integrated Report remain relevant in this regard.

In particular, NEORSD's comments recommend an approach utilizing fish tissue data to evaluate attainment of both Ohio's applicable wildlife and human health criteria for mercury. Ohio EPA's response to this recommendation was that, "The [NEORSD's] suggested approach of multiplying the criterion by trophic-level specific bioaccumulation factors has a higher degree of uncertainty because of the uncertainty in determining bioaccumulation factors."

In fact, because bioaccumulation factors are already incorporated into the denominators of the ambient water quality criteria for mercury, the NEORSD-suggested approach actually has the effect of *removing* the bioaccumulation factors from the evaluation and therefore removing this source of uncertainty. If Ohio EPA lacks confidence in the bioaccumulation factors already in use the Agency should adopt this approach, as it allows a direct assessment of the levels of concern unimpeded by bioaccumulation factors.

Ultimately, we believe that the expressed lack of confidence in bioaccumulation factors should prompt the Agency to reassess the validity of the existing water quality criteria, which rely on them.

Recreation Uses

The standards found in OAC 3745-1-07 for primary contact recreation for fecal coliform state that the "geometric mean fecal coliform content (either MPN or MF), based on not less than five samples within a thirty-day period, shall not exceed 1,000 per 100 ml and fecal coliform content (either MPN or MF) shall not exceed 2,000 per 100 ml in more than ten percent of the samples taken during any thirty-day period." Attainment status for rivers and streams in the report was not based on this standard. Lack of data precludes the use of the standard, and attainment determinations were made based instead upon whether the 75th percentile exceeded 1,000 per 100 ml or whether the 90th percentile exceeded 2,000 per 100 ml. These determinations lack any basis in the State's rules.

Monitoring Schedules

According to the Surface Water Program Summary, the Five-Year Basin Approach for water quality monitoring by watershed was established in order to support water quality management activities such as the re-issuance of NPDES permits and revisions to Ohio's water quality standards. As this program has not been fully funded, the five-year monitoring cycle takes more than ten years to complete. Watersheds within the NEORS D service area are now scheduled for monitoring between 2014 and 2021. If Ohio EPA sampling occurs as scheduled, it is possible that twenty years will pass between assessments on some watersheds. As data older than ten years cannot be used to determine attainment, there may be a period of ten years or more where attainment status of area watersheds will not be known. Any improvements or degradation in water quality that take place during this time period may go unnoticed and/or undocumented. They could thus be excluded from consideration in the NPDES permitting decisions which continue to be made in five-year cycles.

Additionally, in Appendix E.3, for the Cuyahoga River Mainstem (downstream Brandywine Creek to the mouth, including the old channel), the sampling years are listed as 1996-2004. This implies that sampling was conducted every year during this period. However, the 2004 Integrated Report indicates that sampling did not occur every year in this time period. The current report should clarify the years monitoring was conducted.

If you have any questions concerning our comments, or would like to schedule a conference call or a meeting to discuss this matter further, do not hesitate to contact Elizabeth Toot-Levy of my staff at 216-641-6000 or toot-levye@neorsd.org.

Thank you for your consideration of these issues.

Sincerely,



Erwin J. Odeal
Executive Director

cc: RPAC
SST



BUTLER COUNTY
DEPARTMENT OF
ENVIRONMENTAL
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COMMISSIONERS:
CHARLES R. FURMON
MICHAEL A. FOX
GREGORY V. JOLIVETTE

OHIO EPA - DSW

2006 FEB 24 AM 10:08

February 17, 2006

Trinka Mount
Ohio EPA
Division of Surface Water
P.O. Box 1049
Columbus, Oh 43216-1049

RE: FWPCA Section 303(d) TMDL Priority List for 2006

Dear Trinka,

BCDES provides safe, reliable environmental services to Butler County – one of the fastest growing counties in Ohio. Under the direction of the Board of County Commissioners, BCDES provides water and wastewater services to a growing population of over 100,000 in West Chester, Liberty, and Fairfield Townships. BCDES operates two regional wastewater treatment facilities and four satellite treatment plants in Butler County, with an average permitted discharge flow of approximately 30 MGD. BCDES is a member of both the Water Environment Federation (WEF) and the National Association of Clean Water Agencies (NACWA) and strives to be one of the best operated utilities in Ohio.

BCDES respectfully submits the following comments on the above referenced public notice.

BCDES wishes to point out an inconsistency between the draft OEPA 2006 Integrated Report and two previously approved EPA documents. In Appendix E.2 Watershed Assessment Unit (WAU) Results for Mill Creek 05090203 010 (page E.2-324 in the 2006 draft), the next scheduled monitoring is listed as due in the year 2020.

OEPA's Total Maximum Daily Loads (TMDL) for the Mill Creek Basin prepared by OEPA's Division of Surface Water (approved in April 26, 2005 by USEPA) indicates that OEPA will sample the Mill Creek WAU in 2012 and 2015 at river miles 0.8 and 0.3 as referenced in Table 2. Additionally, based on OEPA's 2004 Integrated Report the next scheduled monitoring is due in the year 2012 and, as part of the February 14, 2006 draft NPDES permit and fact sheet for the Upper Mill Creek WRF, Ohio EPA has attached OEPA's approved 2004 Integrated Report.

BCDES recommends that the next monitoring date listed in Appendix E in the draft 2006 Integrated report be changed to the year 2012 to be consistent with previously published and approved EPA documents. BCDES is relying on Ohio EPA to conduct the biological monitoring as outlined in the approved TMDL implementation schedule prior to making significant – millions of dollars – investments in additional nutrient removal improvements.

BCDES appreciates the more detailed list of impairment sources under the WAU Comments section in the 2006 draft. This section states that additional TMDL work or other paths to attainment of Water Quality Standards will be needed to remove the Mill Creek assessment unit from its impairment listing. As mentioned in previous comments to Ohio EPA, BCDES is concerned that the TMDL does not currently reflect, nor has OEPA set out a plan, to address all the sources of impairment and that the burden will continue to fall on the Upper Mill Creek treatment plant to undergo potentially unnecessary capital investments.

BCDES conducted biological studies of the East Fork of the Mill Creek in the years 2000, 2002, and 2003 following stream restoration projects. We have previously furnished our data to OEPA and BCDES requests that OEPA define how data such as that obtained by our studies could be included in the aquatic life use assessment portion of this report to reflect partial attainment.

Thank you for the opportunity to comment on this important issue.

Sincerely,

BUTLER COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES



Julie Frazier
Sr. Environmental Specialist

513-785-5404

CC: Susan E. Vance, Director
BCDES Reg Team
File



The Nature Conservancy
Ohio Chapter
6375 Riverside Drive, Suite 50
Dublin, OH 43017

tel [614] 717.2770
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nature.org/ohio

February 17, 2006

George Elmaraghy, Chief
Ohio EPA
Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216-1049

Attn: 303(d) Comments
Draft 2006 Integrated Report

OHIO EPA - DSW
2006 FEB 23 AM 10:15

Dear Mr. Elmaraghy:

The Nature Conservancy, Ohio Chapter, has reviewed the January 20, 2006, draft of the Ohio 2006 Integrated Water Quality Monitoring and Assessment Report. We greatly appreciate the effort that went into producing this report and the extensive amount and high quality of work needed to create the data it is based on.

The report contains notable achievements and changes which the Conservancy would like to recognize. First, the improvements in stream quality show that persistent and extensive dedication to comprehensive water quality management actually will result in such improvements. The improvements in large river water quality are impressive. Ohio EPA's completion of TMDLs is outstanding, and Ohio is making real progress in attainment of Clean Water Act goals through this process.

TMDL Monitoring frequency

Section 6.4.2 addresses "Long-Term Schedules for Monitoring and TMDLs" (Total Maximum Daily Load). We encourage the Agency to develop more frequent monitoring in order to provide more up to date analyses. Greater frequency could help determine effectiveness of stormwater practices, detect problems, and make corrections.

Many watersheds need more frequent efforts, especially those that are high quality, such as those designated Exceptional Warmwater Habitat, Coldwater Habitat, and Outstanding State Waters. Several of these are in rapidly developing watersheds regulated under the NPDES Phase II stormwater program, and threats and degradation are imminent. Change, often detrimental, could easily occur much more rapidly than the 20 year TMDL cycle. For example, the Big Darby Creek, lower Grand River, lower Little Miami River, and lower Olentangy River are all experiencing growth impacts, and monitoring needs to be done on a frequent basis to help avoid more degradation.

Therefore, we ask the Agency to schedule these watersheds' TMDL work on a much more frequent basis approaching five years, and certainly less than ten.

Scioto River basin monitoring

Although not covered in the 2006 report, we thank the agency for its cooperation with the Ohio River Valley Sanitation Commission (ORSANCO) in completing fish and macroinvertebrate work on the lower Scioto River. We look forward to seeing the report covering the results of this sampling. This effort should help assess the effectiveness of the \$207 million Scioto Conservation Reserve Enhancement Program (CREP). We would also appreciate any further efforts to increase Scioto basin monitoring to support the Scioto CREP.

Lower Grand River monitoring

While the upper Grand River is scheduled for field monitoring in 2009, we ask that this monitoring be rescheduled for 2007 to better support and coordinate with the Watershed Action Plan underway in the watershed, and to match more closely with the lower Grand River monitoring conducted in 2004. Also, in 2005, The Nature Conservancy conducted cool-water species surveys in many streams in the watershed. Our analysis suggests that many tributaries, including Trumbull Creek and Crooked Creek, have characteristics that would qualify them as Coldwater Habitat. These streams potentially support Exceptional Warmwater Habitat as well and should have a proper Ohio EPA survey to set proper use designations.

Muskingum River basin monitoring

We appreciate the agency's scheduling of field monitoring in the Muskingum River basin watersheds in 2007, especially the Kokosing River and Mohican River watershed. This effort is important to support the proposed Muskingum Basin Initiative (<http://www.muskingumbasin.org/initiative/>) of the U.S. Army Corps of Engineers and other agencies, where baseline data and analysis is needed to determine the outcome of any investment in stream improvements.

Dam removal

Recently, Ohio EPA successfully documented the stream quality improvements resulting from the Kent dam on the Cuyahoga River. Other dams are proposed for removal, or have recently been removed. The Conservancy encourages Ohio EPA to work closely with ODNR to evaluate needs for further dam removal, and more extensively evaluate those that are or recently have been removed. Results should be reported as part of the next Integrated Report.

Hydromodification

The Conservancy is aware of the considerable need to modify the flow regime of dams so that streams below these dams can attain more natural conditions and improve aquatic life reproduction, survival and community structure. To date, Ohio has not had extensive practice modifying flow regimes below dams. Ohio EPA does not extensively address this major opportunity in its work or this report. We strongly encourage Ohio EPA to work with other agencies to address this opportunity and include such analyses in future Integrated Reports. If fully implemented, this is another area where Ohio could show major improvements effectively and efficiently. The Nature Conservancy has begun working with dam operators to modify how and when water is released in order to

restore and protect hundreds of river miles and thousands of associated acres of land and wetlands. The largest such effort is the Sustainable Rivers Project, a collaboration between The Nature Conservancy and the U.S. Army Corps of Engineers. Further information is at <http://www.freshwaters.org/eswm/sustrivs/>.

Mussels analysis

Mussels are in decline throughout much of Ohio. Many species are declining, threatened or endangered. This trend contradicts other improvements covered in this report. The lack of adequate attention to this problem is an outstanding shortcoming of the analysis of aquatic life conditions. Working with the Ohio State University Museum of Biological Diversity, ODNR and other agencies, we request that Ohio EPA initiate a review in the Integrated Report that assesses the health and trends of the mussel community, and focuses attention on ways to reverse this trend throughout your work.

Declining and rare fish species analysis

The Ohio Administrative Code, Section 3745-1-05, Table 5-2, lists declining fish species in Ohio. Like mussels, these species are obviously in trouble, and as part of the State of Ohio obligation under the Clean Water Act to protect these and other rare species, we ask for review similar to that described above for mussels.

Again, we appreciate the outstanding work Ohio EPA is doing and fully support continued and expanded efforts. We especially support efforts for expanded funding to allow the agency to more thoroughly monitor and analyze the state of Ohio's water resources.

Sincerely,



Anthony Sasson

Freshwater Conservation Coordinator, Ohio Chapter

cc: Trinka Mount, DSW, Ohio EPA

(From National Wildlife Federation, via email attachment)

Ms. Trinka Mount
Ohio EPA, Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216-1049

February 20, 2006

Dear Ms. Mount,

On behalf of the National Wildlife Federation (NWF), please accept these comments on the Ohio Environmental Protection Agency (OEPA) draft Total Maximum Daily Load (TMDL) priority list for 2006. We have several significant concerns with the draft list, in particular concerning mercury listing and implications for protection of human health and wildlife in the state.

Since 1997, the Ohio Department of Health has issued a statewide fish consumption advisory due to mercury contamination, which currently has recommendation covering all species of fish in the state for both sensitive populations and the general population.

As you are aware, NWF – with our Ohio partners – has had a long-term interest and involvement in efforts to protect water quality in Ohio. NWF staff were heavily involved in the TMDL Advisory Group process in the 1998 – 2000 period, in particular with the air deposition and mercury subgroup. Following up on our report on mercury sources in the state in 1997 (Ohio's Mercury Menace), we have been involved in promoting both voluntary and regulatory solutions to ongoing mercury contamination in the state.

We have two major concerns with the draft 2006 TMDL list, as follows.

The draft list inappropriately excludes water bodies having fish consumption advisories from the category 5 (or TMDL) list. This is contrary to the listing guidance released by U.S. Environmental Protection Agency (EPA) in 2005, which states as follows:

“EPA generally believes that fish and shellfish consumption advisories and certain shellfish growing area classifications based on segment specific information demonstrate impairment of CWA section 101(a) “fishable” uses. This applies to fish and shellfish consumption advisories and certain shellfish area classifications for all pollutants that constitute potential risks to human health, regardless of the source of the pollutant. Furthermore, advisories based on the results from probability surveys or other predictive tools having a high degree of confidence (i.e., 95%) may also form the basis of listing segments as impaired. States, on their own prerogative, may choose to place segments into Category 5 (or on the section 303(d) list) using probability surveys when fish and shellfish consumption advisories and certain shellfish area classifications constitute potential risks to human health.” (U.S. EPA, Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 29, 2005, P. 60).

Further, the guidance also states:

“While numeric human health criteria for ambient water column concentrations of pollutants are a basis for determining impairment, the attainment of such criteria does not always mean that designated uses are being protected.” (U.S. EPA, 2005, Op. Cit.)

OEPA notes that different methodologies are used in its derivation of water quality criteria for protection of human health and the Ohio Department of Health derivation of fish consumption advisory thresholds (Ohio EPA, Ohio 2006 Integrated Water Quality Monitoring and Assessment Report, p. 42). However, the agency inexplicitly considers that the water quality criteria thresholds are more appropriate in listing decisions than the presence of a fish consumption advisory on a specific water body (with water body specific data). This is clearly contrary to U.S. EPA guidance, which notes that:

“Although the CWA does not explicitly direct the use of fish and shellfish consumption advisories or NSSP classifications to determine attainment of water quality standards, states are required to consider all existing and readily available data and information to identify impaired segments on their section 303(d) lists.” (U.S. EPA, 2005, Op. Cit., p. 61)

In fact, concerning fish consumption advisories, OEPA states:

“Ohio EPA’s 2006 IR uses fish contaminant data to determine impairment using the human health based water quality criteria. Fish consumption advisories (FCAs) were not used in determining impairment status. However, the public should use the FCAs in determining the safety of consuming Ohio’s sport fish.” (Ohio EPA, Ohio 2006 Integrated Water Quality Monitoring and Assessment Report, p. 42)

This is quite puzzling, in that it argues (implicitly) that the data used in establishing fish consumption advisories is sufficient for the public to make decisions about protecting their health, but not sufficient for the state to recognize that further efforts are needed to address these water bodies in order to ensure that they are meeting water quality standards (which include protection of human health). The rationale offered by Ohio EPA (Ohio EPA, 2006, P. 50-51) is definitely not consistent with a public health approach, which would argue that the more protective threshold should drive impairment identification and thus restoration targets. Though our focus is on mercury contamination, this argument applies equally to all chemicals for which fish consumption advisories exist in Ohio (including polychlorinated biphenyls). It seems clear that the data used in establishing fish consumption advisories in Ohio meet the standards identified in U.S. EPA guidance, and thus these waters must be listed as requiring TMDL restoration plans under the Clean Water Act.

Furthermore, there is no clear rationale given for the prioritization system described in the draft report (Ohio EPA, 2006, Section 6.2). In this scheme, “impairment of the Recreation Use continues to be more heavily weighted compared to the Aquatic Life Use and Fish Consumption Advisory”. It seems clear to us that the presence of fish consumption advisories should be of equal concern to impairment of recreational use, even if the health threats may be of a more chronic than acute concern.

In summary, we believe attention to the issues above is necessary in order to accurately identify all mercury impaired waters in the state (as well as waters impaired by other persistent, bioaccumulative and toxic chemicals), which will provide a more solid foundation from which TMDL restoration can occur. Successful development and implementation of these plans will be necessary in order to restore these waters to protect the health of people, aquatic life, and wildlife in Ohio.

Sincerely,

Michael Murray, Ph.D.
Staff Scientist

(From Ohio Environmental Council, via email attachment)

February 20, 2006

Trinka Mount, Environmental Scientist
Ohio EPA
Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216-1049

RE: 2006 Draft Integrated Report

Dear Ms. Mount,

The Ohio Environmental Council (OEC) appreciates the opportunity to review the 2006, draft of the Ohio 2006 Integrated Water Quality Report. We greatly appreciate the effort that went into producing the report and the amount of high quality work needed to create it. The report recognizes that improvements in stream quality that can occur with hard work and good water quality management. The improvements in large river water quality are noteworthy and OEPA's efforts regarding TMDL monitoring is excellent and an important value for all Ohio.

Monitoring frequency for TMDL watersheds

OEC encourages the Agency to examine what resources would be needed to provide more frequent monitoring than the draft report suggests. Greater frequency could help determine whether best management practices are yielding good results or if additional measures are needed. For example, the Big Darby Creek, the Grand River, the Little Miami River, and the Olentangy River (in Delaware County) are all experiencing strong growth and monitoring may need to be done on a more frequent basis to help describe if degradation continues. We suggest that monitoring that is more frequent than the report outlines may be needed in these rapidly urbanizing areas.

Scioto River basin monitoring

Although not covered in the 2006 report, we suggest that the schedule for this very large basin should occur sooner than the report outlines, if possible. Several indications suggest that the Scioto River below Columbus may be rebounding to a higher use designation than it currently has. The improvements to the waste water problems of Columbus and the \$200 million Scioto Conservation Reserve Enhancement Program (CREP) may play an important role in heightening these improvements. Therefore any effort to increase Scioto basin monitoring could help support and document these likely improvements.

Great Miami watershed

The Great Miami and associated tributaries are poised for remarkable restoration efforts from a variety of activities. The nutrient trading program recently piloted by the Miami Valley Conservancy District suggests that important restoration could be in the offing for the Miami valley tributaries. As such a removal of a section of the Sevenmile Creek from impaired to warmwater use designation may not go far enough to demonstrate the local conditions. The upper reaches are exceptional warmwater use designation as is the lower section of this waterway. As such warmwater use may not be sufficient to represent the existing use that is

currently being met. If a use attainability analysis is undertaken for this waterway there may be cause to upgrade the portion of Sevenmile being removed from impaired to exceptional warmwater like the stream way sections that bracket the concern area. This could be a good opportunity to capture a significant improvement and solidify restoration efforts in the region.

Dam removal

Ohio EPA has documented the stream quality improvements resulting from the Kent dam on the Cuyahoga River. Other dams are proposed for removal, or have recently been removed. OEC encourages Ohio EPA to work closely with ODNR and watershed coordinators working on TMDL concerns to evaluate needs for further dam removal, and more extensively evaluate those that are or recently have been removed.

Hydromodification in headwater streams

Considerable concern with potential (and real) conflict is arising as drainage needs are becoming more serious in rural areas under going development. Existing maintained stream ways (often called 'ditches') in many cases have not been modified (or maintained) for many years. In some cases these stream ways have reclaimed warmwater use designation but are nonetheless scheduled for "dipping" a euphemism for dredging out the streams and denuding the banks. These streams, in some cases (e.g. Bee Run) have become fully functional natural streams and should be protected to a standard that is established in Clean Water Act law that protects existing uses. These "petition ditch" projects should receive environmental review by OEPA in conjunction with appropriate review by ODNR.

Rare species

While not explicitly protected in the provisions of the primacy authority for Clean Water Act protection the Ohio Administrative Code, Section 3745-1-05 lists endangered fish. We suggest that rare mussel species be given similar elevated notice.

OEC appreciates the excellent work that Ohio EPA is doing and fully supports continued and expanded efforts. These efforts are in the best interest of all Ohioans, those that know the work of the Agency perform truly understand the high quality effort that is provided by Agency staff.

Sincerely,

Daniel M. Binder
Director of Watershed Programs
Ohio Environmental Council
www.theoec.org

cc: Vicki L. Deisner, Executive Director
Keith Dimoff, Deputy Director