APPENDIX I
ATTACHMENT 2: FULL TEXT OF PUBLIC COMMENTS RECEIVED ON IDEM'S DRAFT 2012 303(D) LIST PUBLISHED ON FEBRUARY 8, 2012

The Indiana Department of Environmental Management (IDEM), Office of Water Quality is required by Section 303(d) of the federal Clean Water Act to assess its waters for compliance with the state's water quality standards and periodically prepare and make public a list of those waters not meeting water quality standards. On February 8, 2012, IDEM published its draft 2012 303(d) list of impaired waters with an initial ninety (90) day public comment period from February 8, 2012, through May 8, 2012, for submission of comments on the draft 303(d) list of impaired waters. In the interest of providing more time for Indiana citizens and other interested parties to review the list and provide comment, the public comment period was extended to May 31, 2012. IDEM received comments from the following parties during the comment period:

Alliance for the Great Lakes (AGL)
Citizens Energy Group (CEG)
Environmental Law and Policy Center (ELPC)
Indianapolis Power and Light (IPL)
Indiana Utility Group (IUG)
Ohio River Valley Sanitation Commission (ORSANCO)
Sierra Club, Hoosier Chapter (SC)

ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

May 25, 2012

VIA EMAIL TO: brouse@idem.in.gov

Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
MC 65-45
Indianapolis, IN 46204-2251

Re: 2012 Draft Integrated Water Quality Report

Dear Ms. Rouse:

With 95 percent of America's fresh surface water, the Great Lakes are a national environmental and economic treasure. They provide drinking water, jobs, and recreation to tens of millions of people. As a leisure destination and as a point of access to the lakes, the beaches are a vital component of the recreational and economic enjoyment of the Great Lakes. The quality of the shoreline must be maintained to ensure their continued appreciation by the public and to provide a safe environment for recreational activities, both in and out of the water. The Alliance urges Indiana to commit to the protection of the Great Lakes and its beaches and recommends that the Indiana Department of Environmental Management (IDEM) develop a separate aesthetic recreational use assessment methodology for Lake Michigan which provides:

- An evaluation of phosphorus which uses the Great Lakes Water Quality Agreement phosphorus target for Lake Michigan of 7 µg/L.
- An evaluation of floating debris for Lake Michigan's shoreline including onshore litter.
- An expanded evaluation of algal growth for Lake Michigan's shoreline including onshore algae.

Each of these points is described in greater detail in the attached comment letter. Thank you for the opportunity to submit these comments. Should you have any questions about our comments, please do not hesitate to contact me at 312-939-0838 x230 or lwelch@greatlakes.org.

Sincerely,

Lyman C. Welch
Director, Water Quality Program

Mary Jo Warskow
Dale Bryson Water Quality Intern

17 N. State Street • Suite 1390 • Chicago, Illinois 60602 • (312) 939-0838 • alliance@greatlakes.org • www.greatlakes.org

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Improving Recreational Use of Lake Michigan's Shoreline

Comments to the
Indiana Department of Environmental Management
on
Indiana's Proposed 2012 Integrated Water Quality Monitoring and Assessment Report

May 25, 2012

Alliance for the Great Lakes
17 N. State St, Suite 1390
Chicago, IL 60602
(312) 939-0838

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These comments are submitted by the Alliance for the Great Lakes (Alliance), a nonprofit organization that has advocated on behalf of the Great Lakes and the people who enjoy them for decades. The Alliance's mission is to conserve and restore the world's largest freshwater resource using policy, education, and local efforts, ensuring a healthy Great Lakes and clean water for generations of people and wildlife.

BACKGROUND

The Clean Water Act requires states to asses their waters for compliance with the state's water quality standards. Under Section 303(d) of the Act, each state must make a publicly available list of waters that do not meet the standards. This "303(d) list" identifies the portion of the water body that is impaired, the pollutant(s) causing the impairment, and a schedule for the development of Total Maximum Daily Loads (TMDLs) to restore the impaired waters to health. As such, the 303(d) list is an important part of ensuring that states comply with their water quality standards and work towards the Clean Water Act's goal of fishable and swimmable waters. To improve water quality and human health, it is essential that the list accurately reflect the impairment status of the state's waters.

In providing separate Water Quality Standards (WQS) for the waters within the Great Lakes system, Indiana recognizes the value and uniqueness of the Great Lakes. The Alliance believes this same recognition should be given to Lake Michigan in IDEM's 2012 Integrated Report by using separate phosphorus and aesthetic recreational use assessment methodologies for Lake Michigan waters. While the phosphorus threshold criteria and process may adequately address the most pressing issue for water quality of Indiana's inland lakes, it does not meet the phosphorus target recommended by the Great Lakes Water Quality Agreement for Lake Michigan. Nor does it cover other potential impairment conditions on Lake Michigan's shoreline that are accounted for in the WQS. The Beach Sanitary Surveys (BSS) and Alliance's Adopt-A-Beach™ surveys are two existing and readily available sources of data that IDEM should utilize in their assessment of the Lake Michigan shoreline.

RECOMMENDED REVISIONS TO INDIANA'S PROPOSED 2012 ASSESSMENT METHODOLOGY FOR RECREATIONAL USE SUPPORT OF LAKES:

Assessment methodologies must conform to the specific criteria set forth in the corresponding Water Quality Standard. Because the waters of the Great Lakes are set apart from other Indiana waters in the Water Quality Standards, a separate assessment methodology should be developed to meet these separate criteria. To account for all conditions under the WQS for Great Lake waters, the assessment methodology should provide:

I. An evaluation of phosphorus using the 7 µg/L phosphorus objective for Lake Michigan

One of the many goals of the Great Lakes Water Quality Agreement (GLWQA) is to eliminate nuisance algae growth. Since an overload of phosphorus is a causal factor in excess algal growth, the GLWQA established maximum annual phosphorus loading targets for each Great Lake. Based on these annual loading figures, EPA calculated a 7 µg/L phosphorus concentration objective for Lake Michigan. Wisconsin has integrated this phosphorus objective in their Water Quality Standards and EPA has recommended that all states adopt numeric nutrient criteria. Unfortunately, the threshold of 54 µg/L phosphorus used in IDEM's current assessment methodology for recreational use support of lakes within the context of aesthetics far exceeds the Lake Michigan phosphorus objective. The Alliance recommends that IDEM develop a separate phosphorus threshold for the aesthetic recreational use assessment of Lake Michigan waters which reflects the GLWQA target of 7 µg/L.

II. An expanded evaluation of algal growth for Lake Michigan's shoreline which includes onshore algae.

Excess algae's unsightly appearance and the foul odor that often accompanies it, plus the image of dirty, murky water that it conjures in the public's mind, detract from the aesthetic enjoyment of the shoreline and surrounding environment. The Water Quality Standards affirm that excess algae can "create a nuisance … be unsightly … and impair the designated uses"[I] of Great Lake waters.

Phosphorus sampling is but one way to measure the level of impairment in the water. Visually inspecting the levels of algae in the water and on the shoreline contributes an appraisal of algae's impact on the aesthetics of the coastal waters and beaches. A combination of these two methods would most accurately and completely assess Lake Michigan nearshore waters and beaches for impairment. Because the state's water quality standard requires an analysis of the degree of algal growth to determine if it impairs the designated use, the methodology for determining impairment should include a visual inspection and processes for collecting and evaluating algae data and criteria for making impairment decisions.

EPA has undertaken a great deal of effort to develop a standard Beach Sanitary Survey (BSS) for Great Lakes beaches. The BSS measures algae, both in nearshore waters and on the beach, in predefined categories (None, Low (1-20%), Moderate (22-50%) and High (>50%)) to evaluate potential pollutant sources. Because algae found on the beach is more than likely washed ashore from the nearshore waters, an assessment of algae should include both in water and on shore measurements to accurately determine attainment of the standard. A methodology that only measures the coverage on the surface of the water may underestimate the true level of impairment. A visual inspection methodology modeled on the BSS would enhance the assessment of algal growth on Lake Michigan's shoreline.

For the above mentioned reasons, the Alliance recommends that IDEM develop a separate assessment methodology for the recreational use of Lake Michigan's shoreline which adds visual inspection of algal growth, both in the water and on the beach, to the existing phosphorus sampling processes, and uses the EPA's Beach Sanitary Survey as a model for collecting data on which to base the attainment determination.

III. An evaluation of floating debris for Lake Michigan's shoreline which includes onshore litter.

The negative impact of litter on the aesthetics of the Lake Michigan shoreline is indisputable. Nearshore waters and beaches strewn with dirty cigarette butts, plastic bags, bottles, cans, condoms, and the like, are not an inviting foreground for the natural beauty of Lake Michigan. Of particular concern are those items that not only detract from the view, but also are a health and safety hazard to the public, such as syringes, broken glass and drug paraphernalia.

Floating debris in amounts that are "unsightly or deleterious"[ii] violates Indiana's Water Quality Standards, yet the assessment methodology for aesthetic recreational use of lake waters does not include an evaluation of floating debris. To properly assess compliance with these standards as required by the CWA, IDEM should develop a methodology to assess impairment of Lake Michigan's shoreline from floating debris. As the standard requires a determination of whether amounts are "sufficient to be unsightly or deleterious"[iii], the methodology must include processes for collecting and evaluating debris data and criteria for deciding if the standard has been attained.

EPA's Beach Sanitary Survey, used to assess primary and secondary contact use of the Great Lakes' beaches, provides a standardized format and method for the collection of data on beach conditions, including litter/debris. This standardized evaluation tool ensures all beaches are assessed accurately and uniformly. In their evaluation of debris/litter, the BSS measures the amount of debris/litter, both floating and onshore. Onshore litter is vital to this evaluation because much of the litter that is on the beach was either washed up on the shore from the water or can be washed into the water from the shore. An assessment that does not include onshore litter is not fully accounting for recreational use impairment in the nearshore waters.

Data collection and quality assurance methods used by the Alliance's Adopt-a-Beach™ volunteer survey are modeled on the EPA's BSS methodology. In the Fall of 2011, the Alliance's Adopt-a-Beach™ surveys recorded considerable amounts of litter on a number of Indiana's Lake Michigan beaches. Some examples are: Washington Park Beach, Michigan City - 453 lbs. collected on 9/17/11, Jeorse Park Beach, East Chicago - 625 lbs. collected on 9/17/11 and Lake Street Beach, Gary - 273 lbs. collected on 9/16/11. The top items collected by these volunteers in the surveys of 17 Indiana beaches were: cigarette butts (8,414) caps and lids (2,800), and food wrappers (1,811).

The 2011 Adopt-a-Beach™ data for Indiana's Lake Michigan beaches is included with these comments for your review.

For the reasons stated above, the Alliance recommends that IDEM develop an assessment methodology for the recreational use of Lake Michigan's shoreline which includes an evaluation of litter, both floating and onshore, and uses the EPA's Beach Sanitary Survey as a model for collecting data on which to base the attainment determination. Alliance Adopt-a-Beach™ data can also be used by IDEM in making these assessments.

Thank you for the opportunity to submit these comments. Should you have any questions about these comments, please do not hesitate to contact me at 312-939-0838 x 230 or lwelch@greatlakes.org.

Sincerely,

Lyman C. Welch
Director, Water Quality Program
Alliance for the Great Lakes

Mary Jo Warskow
Dale Bryson Water Quality Intern

[i] 327 IAC 2-1.5-8(b)(1)
[ii] 327 IAC 2-1.5-8(b)(1)
[iii] 327 IAC 2-1.5-8(b)(1)

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citizens energy group

2020 North Meridian St. | Indianapolis, IN | 46202

CitizensEnergyGroup.com

May 31, 2012

Via Electronic Mail: brouse@idem.in.gov
2012 Draft 303(d) List of Impaired Waters

Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
MC 65-45
Indianapolis, IN 46204-2251

Re: Notice of Public Comment Period for the Draft 2012 List of Impaired Waters and Consolidated Assessment and Listing Methodology under Section 303(d) of the Clean Water Act as published in the Indiana Register on February 8, 2012

Dear Ms. Rouse:

Citizens Energy Group ("Citizens") has reviewed the 2012 Draft 303(d) List of Impaired Waters and appreciates the opportunity to provide comments concerning the draft 303(d) list of Impaired Water. Citizens respectfully submits the following comments regarding specific Assessment Unit IDs, addressed by parameter category or mapping/segment issues identified during our review.

E. coli

Comment 1) *E. coli* for the Assessment Unit ID: INW01C2_T1001 (containing the entire watershed of Bean Creek from the headwaters near Orange and Irvington Streets to the confluence with Pleasant Run in Garfield Park).

The City of Indianapolis submitted a TMDL plan for Pleasant Run (which includes all of Bean Creek) in 2002 to the IDEM to address the *E. coli* impairment listing. This plan was accepted and approved by the Indiana Department of Environmental Management (IDEM) and the United States Environmental Protection Agency (U.S. EPA).

The Pleasant Run TMDL plan utilizes the approved Indianapolis Long Term Control Plan (LTCP) strategies for Combined Sewer Overflow (CSO) control and certain septic tank elimination program (STEP) projects as the primary control strategy for *E. coli* in this watershed. Wildlife is also considered to be a source of *E. coli* in this watershed. As a part of the transfer of the wastewater treatment plants and collection system from the City of Indianapolis to Citizens on August 26, 2011, Citizens is obliged to continue implementation of the Indianapolis LTCP.

As included in the approved Indianapolis Pleasant Run TMDL plan, Citizens recommends that this segment be moved to from Category 5A (the Water Quality Standards (WQS) are not attained and the waters are impaired or threatened for one or more designated uses by a pollutant or pollutants, and requires a TMDL to Category 4A (a TMDL has been completed that

results in attainment of all applicable WQS and has been approved by the U.S. EPA), or Category 4B (Other pollution control requirements are reasonably expected to result in the attainment of the WQS in a reasonable period of time) for *E. coli.*

Comment 2) *E. coli* for the Assessment Unit ID: INW01C1_01 (White River from the confluence with Fall Creek to Morris Street).

The City of Indianapolis submitted a TMDL plan for White River in 2002 to the IDEM to address the *E. coli* impairment listing. The extent of the White River TMDL plan is from 96th St (the boundary between Marion County and Hamilton County) to the southern boundary of Marion County, which includes this Assessment Unit segment. This plan was accepted and approved by the IDEM and the U.S. EPA.

The White River TMDL plan utilizes the approved Indianapolis Long Term Control Plan strategies for CSO control and certain STEP projects as the primary control strategy for *E. coli* in this watershed. As a part of the transfer of the wastewater treatment plants and collection system from the City of Indianapolis to Citizens on August 26, 2011, Citizens is obliged to continue implementation of the Indianapolis LTCP.

As included in the approved Indianapolis White River TMDL plan, Citizens recommends that this segment be moved from Category 5A (the WQSs are not attained and the waters are impaired or threatened for one or more designated uses by a pollutant or pollutants, and requires a TMDL to Category 4A (a TMDL has been completed that results in attainment of all applicable WQS and has been approved by the U.S. EPA), or, Category 4B (Other pollution control requirements are reasonably expected to result in the attainment of the WQS in a reasonable period of time) for *E. coli*.

Comment 3) *E. coli* for the Assessment Unit ID: INW0194_03 (Fall Creek from the confluence with Devon Creek to the confluence with White River).

The City of Indianapolis submitted a TMDL plan for Fall Creek in 2002 to the IDEM to address the *E. coli* impairment listing. The extent of the Fall Creek TMDL plan is from the dam at Geist Reservoir to the confluence with White River, which includes this Assessment Unit segment. This plan was accepted and approved by the IDEM and the U.S. EPA.

The Fall Creek TMDL plan utilizes the approved Long Term Control Plan strategies for CSO control and certain STEP projects as the primary control strategy for *E. coli* in this watershed. As a part of the transfer of the wastewater treatment plants and collection system from the City of Indianapolis to Citizens on August 26, 2011, Citizens is obliged to continue implementation of the Indianapolis LTCP.

As included in the approved Indianapolis Fall Creek TMDL plan, Citizens recommends that this segment be moved from Category 5A (the WQSs are not attained and the waters are impaired or threatened for one or more designated uses by a pollutant or pollutants, and requires a TMDL to Category 4A (a TMDL has been completed that results in attainment of all applicable WQS and has been approved by the U.S. EPA), or, Category 4B (Other pollution control requirements are reasonably expected to result in the attainment of the WQS in a reasonable period of time) for *E. coli*.

Impaired Biotic Communities

Comment 4) Impaired Biotic Communities (IBCs) are the third leading cause of impairment of surface waters according to IDEM in the Draft 2012 List of Impaired Waters and are actually a symptom of other, unidentified stressors in the environment. While IBCs are an indicator of pollution, they are not an actual impairment/pollutant. Without knowing the pollutant(s) that is(are) the primary cause of the IBC, one cannot develop a plan to address the impairment(s). Habitat is an example; habitat is not a pollutant, but if the stream conditions (no riffles or runs, lack of shade, mud substrate instead of sand and gravel) are not suited for pollution-intolerant biotic organisms, for whatever reason, the stream will not meet IBC criteria and be placed on the Impaired Waters list.

Citizens recommends that the IDEM place IBC listings under Category 5B (This category also composes a portion of the Section 303(d) list of impaired waters, but the state believes that a conventional TMDL is not the appropriate approach. The State will continue to work with the general public and U.S. EPA on actual steps needed ultimately to address these impairments.). Category 5B is a more appropriate response to address the IBC listing until further investigation identifies the actual stressor(s) that led to the initial listing as an IBC. Listing IBCs under Category 4C (Impairment is not caused by a pollutant. Waters should be listed in this subcategory if the impairment is not caused by a pollutant but is attributed to other types of pollution for which a TMDL cannot be calculated) may also be appropriate to address IBCs listings.

Segment Names and Locations

Comment 5) Assessment Unit ID: INW01A6_T1002 is labeled as "Broad Ripple Tributaries".

Review of sources (USGS West Indianapolis Topological Quadrangle map, dated 1967 and updated in 1980 and 1984; and Indianapolis IMAGES/Arcview shapefiles) reveals this segment to be the Indianapolis Central Canal owned by Citizens Water. This canal diverts water from White River at Broad Ripple for drinking water purposes and is not tributary to White River. The Indianapolis Central Canal ends at the White River Treatment Plant, located at 950 West 16th Street, not at Fall Creek (Attachment A). The Indianapolis Central Canal crosses over Fall Creek via an aqueduct, which does have a spillway from the Central Canal to Fall Creek in the event of high water levels/low water demand. This Assessment Unit segment should be relabeled to reflect the actual and common name (Indianapolis Central Canal) and extended slightly to reflect the actual extent for this water body. The Indianapolis Central Canal is not physically connected to the Downtown Canal as shown in the IDEM's TMDL map shapefile.

In addition, this Assessment Unit segment derives its water from the White River in Broad Ripple. The City of Indianapolis submitted a TMDL plan for White River in 2002 to the IDEM to address the *E. coli* impairment listing. The extent of the White River TMDL is from 96th St (the boundary between Marion County and Hamilton County) to the southern boundary of Marion County, which includes this Assessment Unit segment. This plan was accepted and approved by the IDEM and the U.S. EPA.

The White River TMDL plan utilizes the approved Indianapolis Long Term Control Plan strategies for CSO control and certain septic tank elimination program ("STEP") projects as the primary control strategy for *E. coli* in this watershed. As a part of the transfer of the wastewater treatment plants and collection system from the City of Indianapolis to Citizens on August 26, 2011, Citizens is obliged to continue implementation of the Indianapolis LTCP.

As included in the approved Indianapolis White River TMDL plan, Citizens recommends that this segment be moved from Category 5A (the WQSs are not attained and the waters are impaired or threatened for one or more designated uses by a pollutant or pollutants, and requires a TMDL) to Category 4A (a TMDL has been completed that results in attainment of all applicable WQS and

has been approved by the U.S. EPA), or, Category 4B (Other pollution control requirements are reasonably expected to result in the attainment of the WQS in a reasonable period of time) for *E. coli*.

Citizens also supports the comments provided by the Indiana Utility Group (IUG) on this matter, as well.

Citizens appreciates the opportunity to provide comments. Should you have questions or need clarification regarding the matters raised in this letter, please contact Paul Werderitch of my staff at (317) 429-3571 or pwerderitch@citizensenergygroup.com.

Sincerely,

Ann W. McIver, QEP
Director, Environmental Stewardship


Attachment A
Northwestern Ave
N
Langsdale Ave
W 24th St
Burdsal Parkway
INWD1A6_T1002
IDEM defined End of Segment
INWD1A6_T1002
Actual End of Segment
AUID INWD1A6_T1002
(Indpls Central Canal)
FALL CREEK
Burdsal Parkway
Aqueduct St
FALL CREEK
Milburn St
Montcalm St

ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

May 21, 2012

2012 MAY 23 AM 10:42

Jody Arthur
Integrated Report Coordinator
IDEM Office of Water Quality
100 N. Senate Ave.
Indianapolis, IN 46204-2251

Ms. Arthur,

Thank you for considering these comments from Sierra Club-Hoosier Chapter, Hoosier Environmental Council, Indiana CAFO Watch and the Environmental Law & Policy Center regarding IDEM's assessment and listing methodology for the proposed phosphorus standards for Indiana lakes. Especially considering the impact that algae overgrowth around the state is having on property values, recreation, and aquatic life (see attached), it is critical that the procedures for identifying phosphorus impairments will identify each lake that deserves the additional protections that an impairment listing can provide. There are aspects of the draft methodology presented to the workgroup on February 28, 2012 that would likely exclude many lakes suffering from algae overgrowth from the impaired waters list simply on account of insufficient data. Below we provide our suggestions for how this methodology could be improved to protect water quality for all Hoosiers.

1) **Robust data collection should be the goal, but should not stand in the way of necessary water quality improvements**

The draft methodology proposes to base impairment decisions on twelve sets of paired TP and chl-*a* samples, collected four times per year for three consecutive years. This amount of information about our waterways would be ideal, and would be a vast improvement over the current level of water quality monitoring available in the state. However, this goal of a robust and well-designed water quality monitoring strategy should not stand in the way of diagnosing and remedying water quality problems.

The assessment and listing methodology should not require this level of data collection as the *minimum* that is required to make an assessment. We all know that the state faces serious budget problems, and that IDEM is no stranger to cutbacks in staff and funding. Hinging IDEM's ability to make an assessment of phosphorus-impaired waters on the existence of twelve sets of paired data could cripple IDEM's implementation of an important---and required---element of its delegated Clean Water Act authority. Indeed, such a minimum requirement makes IDEM an easy target for budget cuts that effectively block IDEM's ability to do its job.

Instead, IDEM should identify sampling lakes four times per year for three consecutive years as a *goal*. But the assessment methodology should state that a water is impaired if the *available data* support such a listing. For example, if 11 data sets are available on a given lake from the

35 East Wacker Drive, Suite 1600 • Chicago, Illinois 60601
(312) 673-6500 • www.ELPC.org
Nancy Loeb, Chairperson • Howard A. Learner, Executive Director
Columbus, OH • Des Moines, IA • Jamestown, ND • Madison, WI • Minneapolis, MN • Sioux Falls, SD • Washington, D.C.

past five years, and more than 10% of those samples show exceedences of TP or chl-*a*, then that lake should be listed as impaired. If a discharger or other entity objects to this approach, then they can help to ensure that IDEM meets its goal of at least twelve paired samples.

2) The five-year limit on data should not apply if there is no data within that time

As a general rule, looking at data from the last five years seems reasonable. However, even as we discussed in the workgroup meeting, there are likely scenarios where a sampling rotation might not allow data gathering from a particular lake for more than five years. In cases where there is no data available from the past five years, the methodology should require evaluation of other available data. One cannot assume that time alone will cure phosphorus impairments, or that after five years of neglect a lake will no longer experience foul algae blooms. Therefore, under no circumstances should lakes be removed from an impaired waters list simply because no one has taken water quality samples there for five years.

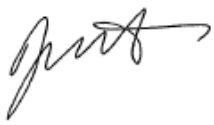
3) IDEM should adopt the 10% rule approach for the allowed number of sample exceedences

The workgroup was asked to provide input on which approach is best for analyzing the data and identifying impairments. Out of the options presented, the "10% rule" (where results are not averaged, and an impairment is identified if either 10% of the TP values or 10% of the chl-a values exceed the water quality criteria) is the only valid approach from a water quality perspective.

Averaging phosphorus or chlorophyll-*a* values – whether an arithmetic average or geometric mean- tends to mask water quality problems and provide an inaccurate impression of the health of the lake being sampled. The "average" of water quality over time is not relevant to either water recreators or aquatic life. People care about whether there is an algae overgrowth when they want to go swimming in their lake on a hot summer day. Explaining that the geometric mean of water quality supports swimming is not very helpful in explaining to a child why her summer vacation is ruined. Similarly, aquatic organisms need to breathe oxygen in every individual instant. It doesn't matter if on average the algae blooms would protect aquatic life if the fish die during the worst water quality. Accordingly, IDEM should adopt the 10% rule to determine impairments.

We thank you for your thoughtful consideration of our comments.

Sincerely,



Jessica Dexter
Staff Attorney
Environmental Law & Policy Center
35 E. Wacker Drive, Suite 1600
Chicago, IL 60601
jdexter@elpc.org
(312) 795-3747

Phosphorus Pollution and Algae Blooms in the Geist Reservoir

September 13, 2011
Environmental Law & Policy Center - Indianapolis, Indiana

Algae blooms in Geist Reservoir (aerial support by Lighthawk)

Scott Rodgers enjoys his job as an executive recruiter for technology firms, his home on central Indiana's Geist Reservoir and his 27-foot Fountain performance boat, which he takes out regularly on the 1700-acre lake. What Rodgers, who directs the Geist/Fall Creek Watershed Alliance, doesn't enjoy are the blue-green algae blooms that foul Geist Reservoir most summers.

These blue-green algae blooms are not flowers or tiny plants as the name suggests but are actually floating bacteria called cyanobacteria. The name is confusing, but the damage they do is very clear. Harmful algae blooms cause taste and odor problems in drinking water, pollute beaches with green pond scum, starve fish and other animals of oxygen, and, worst of all, produce toxins that can damage the skin, nerves and liver.

Geist Reservoir is one of three reservoirs that supply Indianapolis' drinking water, so it was even more disturbing when monitoring in August by the Center for Earth and Environmental Sciences at Indiana University-Purdue University, Indianapolis, showed cyanobacteria counts exceeding

100,000 cells per milliliter and toxin levels above 6 parts per billion. That's high enough to make swimming and ingesting the water dangerous. The same is true statewide; this summer the state's health department warned Hoosiers that exposure to water in many Indiana lakes could lead to rashes, stomach aches and tingling fingers and toes. People need to wash with warm soapy water after exposure. The risks are real: Last year in Grand Lake in St. Mary's Ohio, severe blue-green algae blooms sickened 11 people and killed three dogs.

Controlling phosphate pollution could prevent these algae blooms, says Lenore Tedesco, a freshwater algae expert who directs the Center for Earth and Environmental Science at Indiana University-Purdue University, Indianapolis. In healthy Midwestern rivers and lakes, larger plants, diatoms and green algae dominate. But most rivers and lakes in Indiana have an overabundance of phosphorus caused by fertilizer from farms and suburban lawns, sediment from farms, pet waste and pollution from leaking septic systems. The phosphorus pollution is enough to throw the lake out of its natural balance. Then when it gets hot and dry in July, the cyanobacteria take off, causing the green (or sometimes black) slicks that coat Indiana lakes.

Individuals can help by using phosphate-free fertilizer, properly disposing of pet waste and other simple steps. But to solve the state's algae problem, Indiana needs to set statewide standards for nutrient pollution. Indiana is "about ten years late" in responding to a U.S. EPA mandate that it delineate phosphate levels that it permits in lakes and streams, Tedesco says. But the Indiana Department of Environmental Management has finally begun to develop draft phosphate standards for lakes.

ELPC helped develop strong statewide nutrient standards for Wisconsin in 2011. Wisconsin's standards encourage industries and water treatment plants to work with farmers and landowners to find affordable ways to reduce overall phosphorus pollution. ELPC will work with IDEM to develop standards that address Indiana's phosphorus pollution problem.

Without measures to control phosphate and other kinds of pollution, Rodgers worries that Geist Reservoir could one day resemble lakes in northern Indiana and Wisconsin which have become "big green muck pits," he says. But he's hopeful that by working with people upstream and downstream, Geist Reservoir will one day be a place where his family and neighbors can safely boat and swim.

Indiana ENERGY Association

1600 ONE AMERICAN SQUARE, BOX 82065 INDIANAPOLIS, INDIANA 46282 317-632-4406 FAX 317-262-4940 www.indianaenergy.org

Stan Pinegar, President and CEO
Ed Simcox, President Emeritus
Boonville Natural Gas Corp.
Citizens Energy Group
Community Natural Gas Co., Inc.
Duke Energy
Fountaintown Gas Co., Inc.
Indiana Michigan Power
Indiana Natural Gas Corp.
Indianapolis Power & Light Company
Midwest Natural Gas Corp.
Northern Indiana Public Service Co.
Ohio Valley Gas Corp.
South Eastern Indiana Natural Gas Co., Inc.
Sycamore Gas Co.
Vectren Energy Delivery of Indiana, Inc.

THE VOICE FOR INDIANA ENERGY

May 31, 2012

2012 Draft 303(d) List of Impaired Waters
Ms. Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
MC65-45
Indianapolis, IN 46204-2251

Re: IDEM Proposed Revision to Draft 2012 List of Impaired Waters and Consolidated Assessment and Listing Methodology under Section 303(d) of the Clean Water Act.

Dear Ms. Rouse:

I offer these comments on behalf of the Indiana Utility Group ("IUG") with respect to the Proposed Rule for the Draft 2012 List of Impaired Waters and Consolidated Assessment and Listing Methodology under Section 303(d) of the Clean Water Act. The IUG membership includes the 14 electric and gas utility members of the Indiana Energy Association as well as Indiana Kentucky Electric Corporation, Wabash Valley Power, and Hoosier Energy REC, Inc. The IUG appreciates the opportunity to participate in the development of the rulemaking.

Of key interest to IUG is the identification of water bodies that do not meet the aquatic life use designations and fish consumption uses[1]. Of particular importance is the need to identify a valid methodology for identification of impairment determinations for pollutants of concern[2]. Detailed determinations based upon an appropriate methodology that correctly assesses the condition of aquatic life and the safety of fish consumption is highly recommended. Targeting the state water quality standards must be conducted in a manner that is well documented, not arbitrary in nature, and is designed for each specific pollutant. As United States Environmental Protection Agency ("U.S. EPA"), ORSANCO, and Indiana Department of Environmental Management ("IDEM") embark upon the ongoing exercise of assuring protection of the designated uses,

[1] IUG has historically urged IDEM to remove the fish consumption advisory category and instead focus upon implementation of the human health based water quality standards.
[2] IUG continues to urge IDEM to adopt listing methodologies by rule as prescribed in Senate Enrolled Act 431/IC 13-18/2/3.

embark upon the ongoing exercise of assuring protection of the designated uses, IUG cautions that IDEM proceed only with well-documented processes that have been subjected to appropriate scientific review and assessment. The development of impaired waters listings must be executed with scientific specificity and appropriate peer review.

An obvious example of a pollutant that warrants comment is mercury. Methylmercury fish tissue values are a tool for assessing mercury water quality in streams and lakes. Composite sampling of fish to determine mercury tissue levels is better than what has been done in the past. A properly prepared composite of samples from multiple fish of the same species and approximate size is the best way to derive an estimate of the methylmercury in fish tissue from a specific location. Analyzing methylmercury levels in individual fish is only appropriate if the specimen was obtained from the impaired waterbody, is known to be harvested by fishermen for consumption and too few fish are available to create a composite sample. Composite samples of actual fish tissue should be stratified by fish length as is set forth in U.S. EPA's protocol which addresses the use of the smallest and largest fish. With regard to the actual fish tissue used for analysis, the fillet with the skin removed (i.e., apaxial muscle tissue) is appropriate because most consumers do not eat the skin along with the flesh. IUG is supportive of limiting samples to the edible portion of the fish. Filet dissection must be performed with great care to avoid sample contamination, and the processes for sample preparation, compositing, and analysis must be thoroughly documented. Careful analysis of only those species that are consumed from that waterbody and location is crucial. In addition, weighting factors for different trophic levels (TL3 and TL4) should be done based on the relative consumption of species within a trophic level. U.S. EPA recommends that fish tissue levels be assessed using the trophic level weighted average fish tissue concentration (which in the case of mercury should be methylmercury not simply total mercury). IUG acknowledges that IDEM's implementation of a mercury fish tissue analysis as developed by U.S. EPA is an improvement over what has been done in the past.

U.S. EPA has withheld its approval of IDEM's 2010 303(d) list. IUG supports the legal conclusion that use of total, as opposed to dissolved metals, was not supported by the state water quality standards. IDEM's use of dissolved metals is both legally and scientifically supportable.

IDEM's use of derived criteria, as opposed to the codified water quality standards, is correctly determined to be inappropriate for implementation of Sections 303(d) and 305. In addition, such derived criteria should not be used as the basis for antidegradation implementation for the same reasoning; the criteria derivation procedures have not gone through the full public rulemaking process. IUG supports the removal of streams based upon use of the derived criteria.

IUG appreciates the opportunity to provide comment to the agency's efforts to develop list of impaired waters and consolidated assessment and listing methodology under Section 303(d) of the Clean Water Act.

Very truly yours,

Stan Pinegar

Stan Pinegar
On behalf of the
Indiana Utility Group

BARNES & THORNBURG

Suite 4400
One N. Wacker Drive
Chicago, Illinois 60606
(312) 357-1313

Fredric P. Andes

Fax (312) 759-5646

May 31, 2012

2010 Draft 303(d) List of Impaired Waters:
Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel MC 65-45
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Re: Comments on 2012 Draft 303(d) List

Dear Ms. Rouse:

On behalf of the Indianapolis Power & Light Company ("IPL"], we are submitting these comments regarding the "2012 Draft List of Impaired Waters and Consolidated Assessment and Listing Methodology under Section 303(d) of the CWA." As described below, IPL believes that there are significant flaws in the draft list and methodology, which must be corrected before this document is finalized and submitted to U.S. EPA for approval. In particular, IDEM's listing of waters for PCBs and mercury, based on unpromulgated fish tissue values, and its listing of waters for "impaired biotic communities," based on unpromulgated biological index scores, is illegal under Indiana administrative law. Moreover, these listings are inconsistent with IDEM's proper decision not to base listings on unpromulgated Tier I and Tier II values. The PCB, mercury and impaired biotic community listings should be removed, unless and until appropriate numeric water quality standards for those parameters are promulgated and waters are assessed for attainment of those standards.

I. AVAILABILITY OF DOCUMENTS FOR REVIEW

As an initial matter, IPL needs to note that its ability to provide meaningful comments on the draft list has been severely limited by the inability to obtain relevant documents from IDEM in a timely way. There are three particular waterbody segments that IPL has been focusing on in its review of the draft list, all located on either the White River or the West Fork of the White River. (The reach ID's are INW01D6_M1075, INW02A3_M1052 and INW01G1_M1092. The last reach has now been resegmented into reaches INW01F3_01 and INW01F3_02.) On May 10, 2012, three weeks before the end of the comment period on the draft list, IPL's counsel submitted a request to IDEM for any scientific information that supports the proposed listings of those segments. Until May 25, less than a week before the end of the comment period, IPL had still not received any responsive information. On May 25, IPL received a brief e-mail that summarized the basis

for listing the segments. That e-mail provided numerical values that support one listing on one segment (the "impaired biotic communities" listing for segment INW02A3_M1052), but not for the other segments or for the other listings on that segment. The actual test results that support any of the listings were not provided until May 29, just two days before the end of the comment period. Even then, important information – such as the method of calculating fish counts that determined the IBI scores – was not made available.

IPL has tried to conduct an initial analysis of the information that has been made available. That initial review raises a number of questions regarding the proposed listings. For example, there are two monitoring stations that are just downstream of IPL's Petersburg facility – stations WWL100-0016 (location noted as the White River) and WWL100-0018 (location noted as the West Fork of the White River). IDEM has indicated that the data from these stations form part of the basis for listing as impaired the segment on which the Petersburg facility is located. However, the data from station WWL100-0018 is all from 1995 or 1997 – far too old to use in drawing impairment conclusions in 2012. The data from station WWL100-0016 is more recent – from 2006 and 2011. But the more recent data, from 2011, shows mercury values in fish tissue that are all below the 0.3 mg/kg value being used by IDEM to determine impairment. Moreover, we now understand, based on IDEM's presentation regarding the 303(d) listing process at the Water Board meeting on May 23, that IDEM plans to change the method that it uses to assess waters for mercury impairment before submitting a final 303(d) list to USEPA for review and approval. While the Board presentation summarized the planned changes, there is obviously no way for IPL to apply the changed methodology to determine if particular segments are still impaired. And, IPL has no opportunity to review the revised methodology and comment on whether it is appropriate.

As a result of these procedural problems, IPL has no real ability to determine what listings will, in fact, be submitted by IDEM to USEPA, or to assess whether those listings are correct. For IDEM to proceed to finalize the list without providing IPL (and other stakeholders) with an opportunity to comment effectively on the proposed listings would be a clear violation of due process. IDEM needs to clearly document each of its intended impairment listings, including providing the listing methodology and the data that was considered, and then showing how the methodology was applied to make the listing decisions. After that information is provided, stakeholders should be given a reasonable amount of time to review that information, and submit any necessary comments, before IDEM finalizes the list and submits it to USEPA for approval.

II. PCB AND MERCURY ISSUES

A. Background

All three of the segments that IPL has reviewed are listed as impaired for PCBs and mercury in fish tissue. It appears that these listings are based on fish tissue data that show PCB and mercury levels above the "benchmark criteria" for these parameters that are specified in IDEM's 2012 Consolidated Assessment and Listing Methodology (CALM).

Those levels are as follows: 0.3 mg/kg for mercury and 0.02 mg/kg for PCBs. IDEM's development and use of those "benchmark criteria" – also called "WQS-based assessment thresholds" – to designated waters as impaired, is not legally authorized, and is improper under Indiana administrative law.

In its 2012 Notice (hereinafter "Notice"], IDEM acknowledges that it is required by Section 303(d) of the CWA to determine those waters of the state that do not meet Indiana's "water quality standards." *See, e.g.,* Notice at 1 (IDEM is "required to prepare and make public a list of those waters not meeting WQS." Indiana's "water quality standards" are standards formally promulgated by the Indiana Water Pollution Control Board ("Water Board") as "rules" after undergoing and complying with the full range of due process requirements required by Indiana law, including such safeguards as two 30-day public comment periods, a duty to evaluate and respond to comments, and a rulemaking hearing before the Water Board. *See, e.g.,* Ind. Code §§ 13-14-9-2; 13-14-8-3; and 4-22-2-24, -27, -28.

Indiana does have water quality standards as to PCBs and mercury, which have been promulgated by the Water Board. Those standards include values designed to protect public health from consumption of fish with high levels of contamination. The human health WQS for PCBs are 6.8 pg/l inside the Great Lakes Basin, and 790 pg/l outside the Great Lakes Basin, while the human health WQS for mercury are 1.8 ng/l inside the Great Lakes Basin and 150 ng/l outside the Great Lakes Basin. (Inside the Basin, there are also WQS to protect wildlife – 120 pg/l for PCBs and 1.3 ng/l for mercury.) However, IDEM does not limit itself to using these WQS in making listing decisions. Prior to 2010, IDEM also listed waters as impaired for PCBs or mercury, even if they did not exceed the promulgated standards, if there is a fish consumption advisory issued by the Indiana State Department of Health for the waters, based on high levels of PCBs or mercury in the fish that are present in those waters. In 2010, IDEM decided that those advisories should not be used as a basis for listing waters. We agree. However, IDEM has switched to a new methodology for listing waters as impaired for PCBs and mercury, and we have serious concerns about that new procedure.

Under the new procedure, IDEM has decided to apply fish tissue levels developed by USEPA to assess the existence of PCB or mercury impairments. For PCBs, IDEM applied a human health criterion methodology that was developed by USEPA in 2000, which resulted in a value of 0.02 mg/kg of PCBs in fish tissue. In the case of mercury, IDEM used a recommended water quality criterion that was developed by USEPA in 2001, of 0.3 mg/kg of mercury in fish tissue. These PCB and mercury fish tissue levels were never promulgated by the Water Board, but rather were developed and adopted by IDEM without *any* apparent opportunity for public comment or input. These values were publicly announced by IDEM for the first time in the Notice as part of the basis for its impairment determinations without providing any prior opportunity for public review. And the draft list that was developed using these values has been submitted formally to USEPA, before any public comments have

been received.

B. Use of the Fish Tissue Values is Illegal.

For a variety of reasons, use of the PCB and mercury fish tissue values by IDEM to make 303(d) listing decisions is not legally authorized, and listings made on that basis should be removed from the Indiana 303(d) list. Those reasons are explained in detail below. Before providing those reasons, though, it is perhaps most significant to note that IDEM has already taken action to remove similar listings. In the Notice regarding the draft 2012 list, IDEM states that it has decided not to use unpromulgated Tier I and Tier II values in the 303(d) process. Comments were submitted on this issue when IDEM was developing its 2010 list. Those comments raised concerns about using Tier I/II values, and here is the agency's response:

Due to these concerns, IDEM's legal counsel has reviewed the legality of IDEM's use of derived criteria in these processes within the context of IC 4-22-2. Based on that review, IDEM has decided against using derived criteria for the purposes of making 305(b) assessments and 303(d) listing decisions, or for TMDL development until adequate due process is provided on the derivation and use of derived criteria.

See "Summary of Public Comments on the 2010 Draft 303(d) List and IDEM Responses" (http://www.in.gov/idem/nps/files/303d_2010_epa_sumbit_attch_5.pdf) at 5-3. If IDEM cannot use unpromulgated Tier I and II values in making impairment decisions, then it cannot use the unpromulgated PCB and mercury fish tissue values in making impairment decisions.

In fact, the reasons for not using the fish tissue values are even stronger than for Tier I and II values. In the case of the Tier I and II values, those numbers are at least derived using a procedure that is set forth in Board-adopted regulations. The fish tissue values, in contrast, have no such legal basis. There is no procedure anywhere in the Indiana rules that has led to their adoption. Instead, IDEM has simply adopted a number recommended by EPA in national guidance (for mercury) or derived a number using a procedure recommended by EPA in national guidance (for PCBs). IDEM even notes that in doing so, it has used assumptions (such as a fish consumption rate) that are different than the assumptions that were used in developing the water quality standards that have been promulgated in Indiana. The numbers used by IDEM for mercury and PCBs have no legal status in Indiana, and they cannot be used in making listing decisions.

C. The Fish Tissue Values Must Be Promulgated Before Use.

The PCB and mercury fish tissue values meet the definition of a "rule" under Indiana law and therefore must be promulgated. Indiana law defines a "rule" as "the whole or any part of an agency statement of general applicability that:

(1) has or is designed to have the effect of law; and

(2) implements, interprets, or prescribes:

(A) law or policy; or

(B) the organization, procedure, or practice requirements of an agency."

Ind. Code § 4-22-2-3(b). The PCB and mercury fish tissue values meet the definition of a rule because they are generally applicable, are designed to have the effect of law, prescribe policy, and implement and interpret law. *See, e.g., Indiana-Kentucky Elec. Corp. v. Commissioner*, 820 N.E.2d 771, 780 (Ind. Ct. App. 2005) (IDEM's requirement that ambient air quality monitors be within 10 km of the source was not related solely to IDEM's internal procedures, policies, or organization but instead met the three definitional requirements of a "rule").

Generally Applicable: The PCB and mercury fish tissue values are generally applicable to waters of the State and to many dischargers. They are not merely used in one permit or to regulate one permittee. They are used to determine whether particular water bodies are impaired and therefore should be on the 303(d) list. They are used to develop and allocate pollutant loadings for multiple water bodies under the TMDL process. The numbers directly affect all existing and future dischargers to a water body on the 303(d) list. IDEM is therefore treating these numbers as "generally applicable" within the meaning of this statute.

Effect of Law: The PCB and mercury fish tissue values have the effect of law. They are a critical component of the 303(d) listing program that legally categorizes certain water bodies as impaired, which in turn has significant legal consequences. These numbers are used in the TMDL program and ultimately are used to tell people what they can and cannot legally discharge. If a water body is categorized as impaired using these unpromulgated values, the state becomes legally required to develop a TMDL, which will legally govern discharges to that water body. These numbers also will be used to establish legally enforceable NPDES permit limits outside the 303(d)/TMDL program. IDEM is using these unpromulgated values to create legally binding obligations on dischargers that could require the purchase and installation of expensive pollution control treatment facilities, and can lead to civil penalties or worse in case of violations. These numbers therefore create legal obligations and have the effect of law.

Implements/Interprets/Prescribes Law or Policy: The PCB and mercury fish tissue values also "implement" law. IDEM is using these unpromulgated values to implement Indiana Code § 13-18-2-3, which requires IDEM to prepare a list of impaired waters by considering water quality data. The fish tissue numbers are also used by IDEM to develop the list of impaired waters as required by both the CWA, 33 U.S.C. § 1313(d), and by Indiana Statute, Ind. Code § 13-18-2-3. Finally, the fish tissue values "prescribe policy" because they announce to the state what is and is not an impaired water body. The

rulemaking function "embraces [an] element of generality, operating upon a class of individuals . . . additionally, exercise of administrative rule making power looks to the future." *Blinzinger v. Americana Healthcare Corp.*, 466 N.E.2d 1371, 1375 (determining that the Indiana Department of Public Work's Medicaid rate freeze direction was "in the nature of a rule, and because it was not promulgated in compliance with statutory requirements [Ind. Code § 4-22-2-2], it is void and without effect."). The fish tissue values have implications that are generally applicable and define legal obligations in the future. Those two components are fundamental characteristics of an agency action that requires a rulemaking procedure.

Because the PCB and mercury fish tissue values meet the definition of a rule, they must be promulgated by the Water Board, to which the Indiana General Assembly has delegated exclusive rulemaking power over water quality related matters. This is not some meaningless technical requirement designed to "trip up" IDEM or the Board. There are important public policy reasons why these unpromulgated values should instead be developed and validly adopted only through the rulemaking process. In addition to giving effect to the General Assembly's directive, it allows the public, including the regulated community, to ask questions and to make suggestions as to how the regulations should be changed to be more technically accurate and reasonable; it provides a check on the decisions of unelected administrative officials before the actions of the public are restricted through actual laws; it requires an economic analysis as to the impact of the regulation to be conducted so the Board and public can make necessarily hard decisions about tradeoffs between economic impacts and water quality.[1]

A TMDL based on these unpromulgated fish tissue values can force dramatic changes in discharge permits and therefore dramatic changes in the operations and activities of affected dischargers. They can have significant economic impacts by restricting or preventing expansion of existing operations or siting new operations that would discharge

[1] By proceeding as it has here, IDEM has avoided complying with important, mandatory due process procedures, including the following: Twenty-eight days prior to the adoption of a rule, IDEM must publish a notice of intent to adopt a rule including the intent and scope of the proposed rule in the Indiana Register. *See* Ind. Code § 4-22-2-23(b). The full text of the proposed rule must be published in the Indiana Register and notice of a public hearing must be provided. Ind. Code § 4-22-2-24. A statement regarding the availability of any supporting material for the proposed rule must also be included. *Id.* at (d). After publication of the proposed rule and notice of public hearing, IDEM must hold a hearing on the proposed rule. *Id.* at 4-22-2-26. All comments received at the public hearing must receive full consideration from IDEM. *Id.* at 4-22-2-27. The Water Board may not adopt a rule until it has conducted at least two 30-day comment periods. *Id.* at 13-14-9-2. IDEM must provide the Water Board with a fiscal impact statement of the proposed rule prepared by the office of management and budget. *See Id.* at 13-14-9-4.2. The Indiana economic development corporation must review proposed rules to determine if alternatives exist to reduce the regulatory burden, and IDEM must respond to any comments the IEDC makes before the proposed rule can be adopted. *See Id.* at § 4-22-2-28. The final rule must be adopted within one year from the date that the notice of intent is published in the Indiana Register. Ind. Code § 4-22-2-25. After a rule is adopted, the agency must submit the rule to the attorney general and then the governor for approval. *Id.* at § 4-22-2-31, and -33. These are not trivial procedures to be lightly ignored. They are a cornerstone of our regulatory process to place limits on non-elected officials as they attempt to prescribe law, and they have constitutional underpinnings.

the constituents of concern. And from an environmental perspective, they provide the foundation of one of our most important water programs – to protect water quality and attain water quality standards. It is important that such efforts be subject to the processes established by Indiana law, and that the public be allowed to play its designated role in the process.

It is not clear what the legal basis is for IDEM's use of the fish tissue values in making listing decisions. We believe that IDEM is claiming that these values are "interpretations" of the State's promulgated narrative criteria. If so, then it seems that IDEM is trying to argue that since the public has already had the opportunity to participate in full due process procedures associated with the development of the narrative criteria, no more due process is required for this "translation."

Such an argument is without merit. The reason IDEM must "translate" the narrative criteria is because no one knows what they mean, and they cannot, standing alone, be applied. The narratives can only be used if they are translated into numeric criteria, which then can be compared to actual surface water quality data to make an impairment determination. Thus, IDEM's fish tissue values essentially replace the narrative criteria. In applying the promulgated numeric criteria, IDEM has consistently stated that it cannot modify existing numeric water quality criteria without undergoing rulemaking. *See, e.g.,* Development of Amendments to 327 IAC 2-1-6 Concerning Sulfate Criterion in Waters of the State, LSA Document #07-185 ("The only option for revising a water quality standard contained in Title 327 is through rulemaking.") Accordingly, the numeric values adopted to "translate" the narrative criteria must also be promulgated.

Even if a "translation" of the narrative criteria were not required to be promulgated, the fish tissue values would still be legally flawed, because they cannot be considered to be mere translations of a promulgated rule. To determine whether an agency action is merely an interpretation of a rule, federal courts have developed a body of law to determine what is a lawful vs. unlawful "interpretation." Under these cases, which are instructive here, to determine whether an agency is taking legislative action, a court determines whether the agency's action imposes new duties or creates new law. *See United States v. Zimmer Paper Products, Inc.*, 20 Envtl. L. Rep. 20,556, 20,557 (S.D. Ind. 1989). Courts utilize several criteria to determine whether the action imposes new duties or creates new law. First, courts consider whether the agency action "presently imposes a binding obligation or norm on a regulated firm or individual." *Id.* Second, courts ask whether the agency statement "genuinely leaves the agency and its decisionmakers free to exercise discretion" and noting that an interpretative rule "does not establish a binding norm." *Id.* Third, courts also look to whether the agency action has imposed new and more stringent duties upon regulated entities. *Id.* at 20,558. Courts also look to whether the regulator views the regulations in their present form to be deficient when compared with the requirements of the interpretation. *Id.* at 20,559. Further, courts "give far greater weight to the language actually used by the agency in the past than to its present characterization of the rule." *Id.* at 20,447. Courts also consider whether the particular action is an action of the type that would benefit by the

public comment process. *See Hoctor v. U.S. Dept. of Agriculture*, 82 F.3d 165 (7th Cir. 1996).

The rule versus interpretation factors strongly weigh in favor of the fish tissue values being considered a rule that should be promulgated before it can be used by IDEM. The adoption of these values eliminates agency discretion regarding water quality. Under the narrative criteria, the agency has nearly unfettered discretion to determine whether a water body is meeting the narrative standards or not. But by "translating" the narrative criteria into an actual number, IDEM is left to do nothing but determine whether the waterbody's sampling data is higher or lower than the fish tissue values and must classify the waterbody accordingly. The fish tissue values are a necessary and essential part of the TMDL program which can greatly affect regulated entities as described above. While the unpromulgated fish tissue values in and of themselves do not immediately affect the regulated community, their use in permits, the 303(d) listing process, and the TMDL program all impose new duties on those that are regulated.

III. IMPAIRED BIOTIC COMMUNITY LISTING

One of the segments in which IPL is interested, INW02A3_M1052, is listed for "impaired biotic communities" (IBC). This listing is apparently based on IDEM's analysis of habitat conditions and assessment of the health of the fish community, using Quantitative Habitat Evaluation Index (QHEI) and Index of Biotic Integrity (IBI) scores. As with the listings for PCBs and mercury based on fish tissue values, these listings are not based on adopted numeric water quality standards. The QHEI and IBI metrics have never been promulgated in standards adopted by the Water Board. Therefore, the IBC listing suffers from the same legal flaws as the fish tissue listings, described in detail above. For the same reasons, the IBC listing is illegal under Indiana law and should not be finalized.

IV. LISTING METHODOLOGY

In addition to the due process concerns for PCB and mercury fish tissue values discussed above, IDEM has committed other due process violations. Under Ind. Code § 13-18-2-3(b) the Water Pollution Control Board is required to promulgate a rule that establishes the 303(d) methodology used to identify waters as impaired and "specifies the methodology and criteria for including and removing waters from the list of impaired waters," IDEM has failed to initiate rulemaking on the mandatory requirement.

The General Assembly told IDEM and the Board that rulemaking safeguards must be provided for the 303(d) list methodology. IDEM is circumventing this statutorily dictated due process requirement by not moving forward with the methodology rulemaking. While the General Assembly may not have provided a definite deadline for promulgating the listing methodology rule, it certainly could not have intended that the task be delayed forever. IDEM has already proceeded through several listing cycles without following the statutory requirement. No further delay should be allowed; IDEM needs to move forward now, so

that the rulemaking can be completed before the proposed 303(d) list is finalized and submitted to EPA. The reasons why this is needed (in addition to being statutorily required) are even clearer given IDEM's stated intent to make changes to its listing methodology, and resultant changes to the 303(d) list, before submitting the final list to EPA. IPL and other stakeholders will have had no opportunity to review or comment on the changed methodology or on the changes to the list that result from use of that methodology. If IDEM went through a formal rulemaking process as to the methodology, that lack of public review and comment would not happen.

V. CONCLUSION

IPL believes that the legal and scientific issues identified above need to be addressed before IDEM finalizes its 303(d) list and submits it for U.S. EPA approval. If you have any questions, or would like to meet to discuss these issues further, please feel free to contact me, at 312/214-8310 or fandes@btlaw.com .

Very truly yours,

Fredric P. Andes

Cc: David Heger, IPL
Nysa Hogue, IPL
Dwayne Burke, IPL
Mike Scanlon, B&T

Comments on IDEM's 303d Listing Methodology

Jason Heath [jheath@orsanco.org]

Sent: Thursday, May 31, 2012 3:45 PM

To: ARTHUR, JODY

Dear Ms. Arthur,

Understanding that today is your deadline for comments, I am submitting ORSANCO's comments on your 303d assessment and listing methodology to you by email. ORSANCO is highly supportive of IDEM using USEPA's recommended methodologies for utilizing fish contaminants data to assess the fish consumption use. These methodologies employ use of "consumption-weighted" averages based on contaminant data from trophic levels 2, 3 and 4 fish, and compares that to the established tissue criteria for determining whether impairment is indicated. ORSANCO uses this approach on a pool-basis for the Ohio River. This approach has been endorsed by ORSANCO's Technical Committee which is composed of the heads of the eight states' water protection departments.

Please let me know if you have questions or would like additional information regarding our comments on your 303d listing methodology. Thank you.

Sincerely,

Jason Heath, P.E., BCEE

Technical Programs Manager & Assistant Chief Engineer
Ohio River Valley Water Sanitation Commission
5735 Kellogg Ave.
Cincinnati, OH 45230
513-231-7719 x 112 work
859-630-7235 cell
jheath@orsanco.org
www.orsanco.org

SIERRA CLUB
FOUNDED 1892

Hoosier Chapter
1100 W. 42nd Street, Suite 140
Indianapolis, Indiana 46208
Phone: 317.822.3750
hoosier.sierraclub.org
bowden.quinn@sierraclub.org

2012 Draft 303(d) List of Impaired Waters
Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
MC 65-45
Indianapolis, IN 46204-2251

May 31, 2012

Dear Ms. Rouse:

The Hoosier Chapter of the Sierra Club, Hoosier Environmental Council, Indiana CAFO Watch, Save the Dunes Council, Save Maumee Program of Lake Erie Waterkeeper and the Environmental Law and Policy Center of the Midwest submit these comments on the 2012 draft 303(d) list of impaired waters. We have the following concerns about the draft list:

I. Failure to list impaired waters using derived criteria

IDEM should list waters found to be impaired using derived criteria, as required by the U.S. Environmental Protection Agency. There is no reason to believe that derived criteria are inherently unreliable. Further, while individual derivations have not gone through the procedures used to establish numeric water standards, the criteria derivation procedures are set forth in the Indiana Code at 327 IAC 2-1-8.2 through 8.9 and have gone through the same rulemaking process used to establish numeric criteria.

IDEM acknowledges that the narrative criteria can be used to establish effluent limits, as it must if the department wishes to maintain authority to issue NPDES permits. 40 CFR 122.44(d) (1)(i) states clearly that NPDES permits must limit all pollutants that would violate numeric or narrative criteria. However, IDEM through its Office of Legal Counsel claims that there is some sort of due process right preventing waters being listed through use of derived criteria. (See the September 12, 2011 Letter of David R. Joest to Peter Swenson on pages 77-81 of the report).

The purported due process violation is illusory. No individual right would be lost through the use of derived criteria to list a water. A TMDL based on a listing that improperly applies a derived criterion could be challenged by a party that reasonably believes its rights would be injured and a permit limit based on a TMDL under 40 CFR 122.44(d)(viii)(B) might be challenged using the procedures for permit challenges.

The only injury that a discharger would seem to suffer from a 303(d) listing of a water to which it discharges is heightened public awareness of the potential for environmental harm caused by the types of discharges made by the discharger. This very slight and indirect harm is fully justified by the fact that derived criteria are based on sound science.

The practical consequences of IDEM's position regarding derived criteria would appear to require that the U.S. EPA essentially take over the Indiana listing process. There are thousands of chemicals that enter Indiana waters and the Indiana processes for setting numeric criteria are very slow. Failing to list waters for pollutants without numeric water quality criteria would mean that many clearly impaired waters would not be placed on the 303(d) list for the foreseeable future.

Furthermore, the draft 2012 list has several causes of impairments that aren't based on numeric criteria, namely algae, impaired biotic communities, nutrients, phosphorus, siltation, and taste and odor. It is inconsistent for the Office of Legal Counsel to select derived criteria as the only non-numeric cause of impairment where it finds a due process violation, thereby setting a pernicious precedent that could undermine IDEM's authority to compile the 303(d) list.

II. Use of total and dissolved metals criteria

IDEM decided not to place on the 2010 303(d) list waters for pollutants for which it has only total metals criteria. It is unclear to us from the publicly noticed draft to what extent IDEM has data in waters regarding dissolved metals, has site-specific hardness data that would allow a translation of total metals to dissolved figures, or has exercised any discretion or common sense in deciding to exclude waters that are almost certainly impaired for metals based on comparison of the total metals data and the known conditions in Indiana waters. It does appear clear that IDEM's decision not to list waters as impaired by certain metals for which there is no dissolved data again biases the list against listing of waters that receive metal discharges.

It appears that IDEM could have listed some or many of the waters for which there is a whole/dissolved issue in one of the following manners:

- As the EPA suggests, IDEM could simply use the whole metals data and compare that with the dissolved criteria. Admittedly in some cases this would lead to more listings than would occur were dissolved metals data available but this is preferable to systematically failing to list a whole class of waters.

- Also as the EPA suggests, IDEM could use the conversion factors set forth at 327 IAC 2-1-6. Mr. Joest in his letter rejects this approach and quotes language that cautions against using such conversion factors, which appears in the Metals Translator: Guidance for Calculating A Total Recoverable Permit Limit from a Dissolved Criterion (EPA 823-B-96-107, June 1996). Apparently Mr Joest missed a footnote in that document which states:

  > As a reasonable worst case . . . it may be assumed that metal in the receiving environment would be biologically available to the same extent as during toxicity testing; and the conversion factors may be used as translators if a site-specific translator is not developed. n.6, p.5

- Finally, if IDEM wishes even to list the bare minimum of waters that are impaired by metals for which site-specific data is lacking, it could use its knowledge of Indiana waters to make reasonable judgments about waters that are impaired under the dissolved standard under almost all conditions that are likely to be present in Indiana waters.

III. Placement of mercury and PCB-impaired waters in a separate category

Beginning with the 2006 303(d) list, IDEM has placed waters impaired due to high levels of mercury or polychlorinated biphenyls (PCB) found in fish tissue in a separate impairment category, 5B. It provides its rationale for this separate category on page 43 of the report:

> To date, states have received little guidance from U.S. EPA regarding how to develop a TMDL to restore a waterbody with elevated levels of mercury or PCBs, or both in fish tissue. IDEM has placed all fish tissue impairments in a separate category of the list (5B) because it does not believe that, at this point in time, a conventional TMDL is the appropriate approach for addressing these impairments. Until adequate guidance is available, IDEM believes it to be more prudent to focus its limited resources on developing TMDLs on impairments for which appropriate methods have been established.

Fish tissue contamination is the second leading cause for the placement of a water body on the list, with 618 PCB and 348 mercury impairments, behind only *E. coli* (1,136) and ahead of impaired biotic communities (615). Moreover, fish tissue contamination is the impairment most closely tied to human health endangerment. The level of fish tissue mercury concentration that IDEM uses to designate a water as impaired is >0.3 mg/kg, which exceeds the lowest level concentration (0.2 mg/kg) of the Indiana State Department of Health's Group 3 classification in its fish consumption advisory (p. 35). Its advice for consumption of fish in that group is to

> Limit to one meal per month (12 meals per year) for adult males and females. **Women who are pregnant or breast-feeding, women who plan to have children, and children under the age of 15 do not eat.** (*2010 Indiana Fish Consumption Advisory,* p.6, emphasis in the original.)

The correlation with the fish consumption advisory for PCB concentrations in fish tissue is less precise, since water impairments start at >0.02 mg/kg, a level that includes all groups in the advisory, which begins at <0.05 mg/kg. However, the impairment of waters due to a finding of mercury or PCB contamination in fish tissue is clearly a serious health issue. Therefore it is disturbing that IDEM has taken no apparent action to address the problem.

On page 42 of the 2012 report, IDEM says "[t]he state will continue to work with the general public and the U.S. EPA on actual steps needed ultimately to address these impairments." It used the exact same words in its 2010 report. (Attachment 2: Consolidated Assessment and Listing Methodology, p. 2-44). What "actual steps" has it taken in the past two years to address fish tissue contamination? Admittedly, the EPA is also at fault for not addressing the problem sooner, but recently it has promulgated a rule to reduce the major source of mercury contamination—emissions from coal-fired power plants.

IDEM must also begin to address the problem. In 2011 an IUPUI professor, Gabriel Filippelli, co-authored a report linking emissions from Indianapolis power plants with mercury deposition on the northeast side of Marion County, which then got into the White River, posing a health risk

for people downstream who catch and eat fish from the river.[1] Since IDEM regulates air pollution as well as water pollution, it should not simply ignore the problem because it believes "a conventional TMDL is not the appropriate approach." (p.42)

IDEM submitted a long-term TMDL development schedule with its 2010 impaired waters list. Some PCB impairments date back to 1996 and IDEM said that the target date for a TMDL for these oldest listings was 2011. However, it didn't do those TMDLs. As for mercury, all of the listed impairments were dated to 2010 and all of the target dates for TMDLs were 2025. (2010 303(d) Attachment 7: Long Term TMDL Schedule; http://www.in.gov/idem/nps/files/303d_2010_epa_sumbit_attch_7.pdf).

IDEM and the U.S. EPA must no longer ignore this serious public health problem. The EPA should not accept the separate 5B category for these impaired waters. Both the agency and the department should begin to take positive measures to remediate the impairments or at the very least to stop more waters from becoming impaired due to contaminated fish tissue.

Thank you for your consideration of these comments.

Bowden Quinn
Conservation Program Coordinator
Sierra Club Hoosier Chapter

Kim Ferraro
Water and Agricultural Policy Director
Hoosier Environmental Council

Jessica Dexter
Staff Attorney
Environmental Law and Policy Center

Nicole Barker
Executive Director
Save the Dunes Council

Abigail King
Lake Erie Waterkeeper
Save Maumee Program

Barbara Sha Cox
Indiana CAFO Watch

p.s. The Hoosier Environmental Council posted this comment letter on its website and asked people to sign on. The following 19 people submitted their names:

Kim Shetterly
Chesterton, IN
Kdlpsindy@yahoo.com

Ryan Puckett
Indianapolis, IN
ryan@two-21.com

Andrew Hart
Indianapolis, IN
Bandrewhart@yahoo.com

Katarina Koch
Crown Point, IN
kochk88@gmail.com

Holly Puckett
Indianapolis, IN
holly.puckett@myemail.iwu.edu

Richard Hill
Madison, IN
phill@venus.net

Kevin Cornett
Valparaiso, IN
metalmankev55@yahoo.com

Joe Scheidler
Logansport, IN
Scheidjl@frontier.com

Sara Laycock
Indianapolis, IN
saralaycock@gmail.com

[1] Hatcher, C.L.*, and Filippelli, G.M., 2011. Mercury cycling in an urbanized watershed: The influence of wind distribution and regional subwatershed geometry in central Indiana, USA. Water, Air, and Soil Pollution. doi:10.1008/s11270-010-0703-7.

Brenda Rising-Moore
Indianapolis, IN
Brenda@unionjackpub.com

Michelle Ruggio
Monticello, IN
mamapeapod@aol.com

Megan Anderson
Bloomington,IN
Megaande@indiana.edu

Dorothy Rahmoeller
Lake Village, IN
kong@netnitco.net

Samuel Flenner III
Indianapolis, IN
sam_flenner@yahoo.com

Gary Moody
Franklin, IN
smalltownbigcityguy@yahoo.com

Mary Brock
Indianapolis, IN
mebrock74@gmail.com

Nancy Moldenhauer
Michigan City, IN
nmolden@comcast.net

Dennis Brittain
Michigan City, IN
Dbrittain@gmail.com

Matthew Landry
Laporte, IN
lattmandry@gmail.com