Illinois Environmental Protection Agency

Draft Illinois Integrated Report and Section 303(d) List, 2018 – Appendix F

Responsiveness Summary

Regarding

June 15, 2018 – July 31, 2018 and

May 9, 2019 – May 24, 2019 Public Notices

Illinois Environmental Protection Agency
Office of Community Relations
August 31, 2020

Bureau of Water

Draft Illinois Integrated Report and Section 303(d) List, 2018—Appendix F, Responsiveness Summary

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:

Draft Illinois Integrated Water Quality Report and Section 303(d) List, 2018

Background Information

The Illinois Environmental Protection Agency (Illinois EPA or Agency) issued notice on June 15, 2018, for public comments on the Bureau of Water draft Illinois Integrated Water Quality Report and Section 303(d) List of Impaired Waters, 2018 (draft 2018 Integrated Report). On June 14, 2018, the draft 2018 Integrated Report was posted on the Illinois EPA website with a public comment period running from June 15 through July 16, 2018. On July 11, 2018, the comment period was extended through July 31, 2018, and the extension of the public comment period was posted on the Illinois EPA website.

Later the Bureau of Water found that the assessments on 33 stream reaches, all located in southern Illinois, had not been updated in the draft 2018 Integrated Report. This finding triggered the opening of a 15-day public comment period to accept comments on these stream reaches. On May 8, 2019, a notice of the 15-day public comment period was posted on the Illinois EPA website and distributed to all on the contact list for this proceeding. This comment period opened on May 9, 2019, and closed on May 24, 2019.

The draft 2018 Integrated Report identifies Illinois waters that do not meet applicable water quality standards and designated uses. The assessment and evaluation of State waters are required under Sections 303(d), 305(b) and 314 of the federal Clean Water Act.

Waters that are deemed impaired for specific chemical constituents are identified in the draft 2018 Integrated Report in accordance with Section 303(d). Consequently, additional future loadings (i.e., discharges) of those constituents to these waters may be restricted. In addition to possible restrictions on future loadings to these listed waterbodies, waters identified in the Section 303(d) list are subject to the development of Total Maximum Daily Loads (TMDLs). A TMDL is a total allowable amount of a single pollutant that a waterbody can receive from all contributing sources and still meet water quality standards to protect designated water uses. In Illinois, a TMDL may take the form of a watershed study in which the chemical constituent causing impairment to that water body is evaluated.

Public Notice Record

The Illinois EPA issued a public notice and opened a public comment period for the draft 2018 Integrated Report on June 15, 2018. The initial public comment period closed on July 31, 2018. During the initial public comment period, Illinois EPA received four comment letters via electronic correspondence and two hard copy letters from the public. Additionally, the United States Environmental Protection Agency (USEPA) submitted electronic comments during the initial public comment period.

A 15-day comment period was issued by the Illinois EPA on May 9, 2019, showing the corrections for several use-attainment determinations and causes of use impairment for stream reaches which were inaccurately represented in the original public-noticed draft 2018 Integrated Report. This 15-day public comment period closed on May 24, 2019, and USEPA was the sole entity that provided comments.

This Responsiveness Summary provides the Illinois EPA responses to questions and issues raised during the two public comment periods.

Agency Responses to Questions, Concerns, and Comments

Questions, concerns, and comments are in regular type. **Agency responses are in bold type.**

1. These comments pertain to the following stream segments as listed in the draft 2018 Integrated report:

   Sewer Creek (IL_OJCB-19) & {IL_OJCB-20) ... tributary to:
   Grand Point Creek {IL_OJC-01) ... tributary to:
   Crooked Creek (IL_OJ-07), (IL_OJ-08), and (IL_ OJ-11)

   On February 26, 2018, the City [of Centralia] representatives attended a meeting with representatives of the Bureau of Water and Division of Water Pollution Control Permit Section. At that time, they informed the City that none of the streams receiving effluent from Centralia STP #1 are impaired, despite the fact that they were listed in the 2016 303(d) list, and further indicated that "offensive conditions" have not been documented. Each of these stream segments, except Sewer Creek (IL_OJCB-20) are listed as being impaired for inclusion with the 303(d) list. Please find attached our summary comparison of the Agency's findings in the 2016 and draft 2018 Integrated Water Quality Report. In summary, the Agency does not have any records of water quality data to support the allegation that the referenced stream segments are impaired, and no records were available to indicate presence of "offensive conditions".

   In view of the Agency's responses to the City's FOIA requests, and IEPA's comments to the City during a meeting with the Agency on February 26, 2018, the City respectfully concludes that the [aforementioned] stream segments were mistakenly included on the draft 2018 list and prior lists, are not impaired, and should be excluded from the 303(d) impaired stream list, in the final 2018

Integrated Water Quality Report. The City of Centralia respectfully requests that the Agency exclude these stream segments from the 303(d) list as being impaired, in the final 2018 Integrated Water Quality Report. Further, [the City] respectfully requests that the Agency issue to the City written notification of the Agency's disposition to this request…We desire the opportunity to review any additional data the Agency may have to support its position prior to the close of the public comment period.

Response: The Illinois Environmental Protection Agency (Illinois EPA or Agency) disagrees that the relevant "...stream segments were mistakenly included on the draft 2018 list and prior lists, are not impaired, and should be excluded from the 303(d) impaired stream list, in the final 2018 Integrated Water Quality Report." The basis for the relevant assessments can be found in Table 1, Addendum to Response #1 on page F-24.

2. Section A-2 (page 7) states that the three new tiers of Aquatic Life Uses (Upper Dresden Island Pool Aquatic Life Use, Chicago Area Waterway System [CAWS] Aquatic Life Use A, and CAWS and Brandon Pool Aquatic Life Use B) were assessed for the 2018 cycle. As such, these uses, and associated information should be added to Table ES-I (page 1). Currently, it appears that all of the CAWS waterways are still included under Indigenous Aquatic Life Use. Similarly, Appendices A and B list Indigenous Aquatic Life Use for all CAWS waters and should be revised to include the three new Aquatic Life Uses.

   Response: In the draft 2018 Integrated Report, the Illinois EPA aggregates into a single category (i.e., Indigenous Aquatic Life Use) the summary assessment information on waters designated for any of the three new aquatic-life uses mentioned in the comment. The Agency also includes in this single category, the aquatic-life use that pertains solely to South Fork South Branch Chicago River. The Illinois EPA did so for database-efficiency reasons. In future Integrated Reports, summary assessment information will be segregated for each of these four uses.

3. As the [Metropolitan Water Reclamation] District [of Greater Chicago] has stated in comments on previous Illinois Environmental Protection Agency (Illinois EPA) Integrated Water Quality Reports, we do not support maintaining former total phosphorus (TP) listings that were determined using an 85th percentile threshold without any scientific evidence that TP is negatively impacting the aquatic life in the stream segment. We urge the Illinois EPA to remove TP as a cause of impairment unless this is based on scientifically sound threshold values or regulations that more clearly define standards for TP.

   Response: Illinois EPA acknowledges that some past-identified causes that remain associated with Illinois 303(d)-listed water bodies are not directly related to Illinois water-quality standards. In the 2008 and 2012 Integrated Reports, Illinois EPA provided to USEPA its basis for removing waters or potential causes based on guidelines that were not directly related to Illinois water-quality standards. Recently, USEPA and Illinois EPA resolved longstanding disagreement on these causes. Illinois EPA addresses this resolution in Appendix G of the cycle-2018 integrated report.

4. The Illinois Association of Wastewater Agencies (IAWA) continues to believe that including phosphorus, sedimentation/siltation, and sediment as causes of aquatic life use impairment in Illinois streams should not be made by Illinois EPA because the threshold values used are arbitrary and not scientifically correlated with stream health. These parameters should be removed from the listing until such time as the Illinois Pollution Control Board water pollution control regulations more clearly define standards for these parameters, or a vetted, published methodology is used to identify and establish cause and response stressor analysis using multiple lines of evidence. The IAWA does not support maintaining previous listings which were generated by the use of simply taking an 85th percentile of data that existed over a decade ago and using that value as a threshold to determine impairment causes. Illinois EPA should end the practice of this arbitrary mis-application which leads to unnecessary regulatory efforts such as the development of TMDLs that can't be conducted because of the lack of an appropriate regulatory goal.

   There is no scientific validity to the assertion that these constituents at these levels are negatively impacting aquatic life use in streams in Illinois. Numerous studies conducted in Illinois for the Illinois EPA (various CFAR Studies of 2000s) and USEPA (Tetra Tech, Inc., 2008) for the purpose of determining defensible nutrient standards have failed to show any correlation between total phosphorus (TP) and algae, dissolved oxygen, or biota in Illinois streams. Continuing to define stream segments as impaired for TP is contrary to the best and only directly pertinent scientific information on the topic. Continuing this incorrect listing mis-informs the public and stakeholders, and can lead to irretrievable, expensive and damaging regulatory decisions. These listings are not based on any violations of any Illinois Pollution Control Board water quality standard, and the Agency has no direct or indirect evidence linking these specific levels to aquatic life impairment in streams.

   Response: Please refer to response to comment #3.

5. IAWA does not agree with the universal identification of phosphorus as a default contributing cause to any algae or aquatic plant aesthetic use impairment in Illinois streams. Illinois EPA has not produced any evidence supporting the assertion that water column phosphorus has any causative role in excessive macrophyte growth in Illinois streams. Any such characterization should be rigorously supported with a vetted, published methodology used to identify and establish cause and response stressor analysis using multiple lines of evidence. Scientifically valid threshold levels should be established before identifying any parameter as a causative agent, for either excessive macrophyte or algal growth.

   The report text states that any aesthetic use impairment identification for algae or plant growth results in listing TP as a contributing cause, which implies that supporting chemistry data is not needed for this characterization. Any such listing should, as a minimum, be accompanied by corroborating stream chemistry data before including phosphorus as a contributing cause. Since the preponderance of evidence suggests physical habitat drives primary productivity in Illinois streams, Illinois EPA should consider listing this as the cause of algae-related impairment rather than total phosphorus. Such a step might encourage resources to be spent on habitat improvements, which clearly have a better chance of addressing such impairments.

Response: Phosphorus is a nutrient required for the growth of plants and algae. Offensive growths of plants or algae cannot exist without it. It is also a pollutant discharged into Illinois waters by human actions. The Illinois EPA is required by federal regulation to identify the pollutants causing violations of Illinois water quality standards and to develop TMDLs for those pollutants.

Illinois EPA does not list habitat factors as contributing causes of algae-related impairment for the following reasons. While certain habitat conditions may retard the growth of plants or algae, the absence of these conditions cannot cause plant or algal growth unless sufficient nutrients are available. Where anthropogenic changes in habitat create conditions which allow nutrient-rich waters to generate offensive plant and algal growth, such anthropogenic changes are not required to be listed because they are not pollutants and are not subject to TMDL development. However, these anthropogenic changes, such as removal of riparian vegetation, are often identified as sources of the impairment.

6. Stream segments with total phosphorous (TP) concentrations exceeding the 85th percentile of the State's TP data continue to be listed as impaired by the Illinois EPA. The [Bloomington Normal Water Reclamation District (BNWRD)] does not agree with the Illinois EPA listing of TP as a cause of aquatic life use impairment based on this unjustified methodology that lacks scientific validity. A scientifically defensible TP concentration protective of aquatic life in Illinois streams has yet to be developed and approved by the Illinois EPA. Given the fact that numeric standards for phosphorous in Illinois streams do not exist, the [BNWRD] disagrees with the draft 2018 Integrated Water Quality Report listing of Sugar Creek (EID-C1) as impaired. The [BNWRD] respectfully requests the designation of Sugar Creek (EID-C1) as impaired for aquatic life due to phosphorous be removed from the draft 2018 Integrated Water Quality Report listing.

   Response: Please refer to response to comment #3.

7. Additionally, the [BNWRD] strongly supports comments on the draft 2018 Integrated Water Quality Report submitted by the Illinois Association of Wastewater Agencies (IAWA), and hereby incorporates those comments into these comments by reference.

   Response: Please refer to response for comment #3.

8. Certain data does not seem to have been used in preparation of the report that should have been. Illinois collects data on harmful algal blooms (HABs) in at least some locations. Was data on HABs considered in determining whether waters met recreational, public water supply and aquatic life uses?

   Response: For reasons described in responses to #19 and #21, data collected under Illinois EPA's HAB Program are not currently being used to make use attainment decisions.

9. Further, the Metropolitan Water Reclamation District (MWRDGC) performs continuous dissolved oxygen monitoring (CDOM) at a number of locations that is summarized in reports contained on the MWRDGC's website.

a. Did IEPA utilize MWRDGC's CDOM data?

Response: No. Data from MWRDGC's Ambient Water Quality Program from the years 2013-2015 along with a Quality Assurance Project Plan were submitted to the Illinois EPA. CDOM data was not part of this. Submitted data was reviewed and used for the draft 2018 Integrated Report.

b. Did Illinois EPA review hourly data to determine whether it revealed information not apparent in the summarized reports?

Response: No. CDOM data was not part of MWRDGC's submittal.

c. Did Illinois EPA consider hourly data to determine if there were diel dissolved oxygen or pH movements that would indicate algal blooms or unnatural plant growth?

Response: No. CDOM data was not part of MWRDGC's submittal.

d. Did Illinois EPA consider whether temperature changes in the Chicago Area Waterways or in other Illinois waters violated temperature water quality standards, 35 Ill. Adm. Code Section 302.211(b)?

Response: Yes. Illinois EPA reviews water temperature data to determine temperature standard violations per 35 Ill. Adm. Code Section 302.211(b) in the Chicago Area Waterways and other Illinois waters.

e. Does [Illinois EPA] incorporate all stream and river data collected by USGS in Illinois into its report?

Response: No. Illinois EPA did not incorporate "all data collected by the USGS in Illinois" into the draft 2018 Integrated Report. The statement, "…and the National Stream Water Quality Network monitoring program (http://nwis.waterdata.usgs.gov)" from Solicitation of Information, paragraph 1, page 9, has been deleted.

f. Given the limits in the miles of Illinois streams that Illinois EPA staff are able to assess, has the Agency considered how a citizen monitoring program could increase the state's ability to assess more streams? Would the Agency consider working with our groups (and other river groups) to establish a common stream monitoring program protocol akin to the Agency's Volunteer Lake Monitoring Program?

Response: Illinois EPA remains open to considering such a program; however, Illinois EPA does not presently intend to establish one.

10. On page 8 of the [draft 2018 Integrated Report], Illinois EPA notes that it is no longer considering six lakes for 305(b)/303(d) reporting because these lakes are "treatment works" not subject to the same regulations as other lakes. [The Illinois Chapter of the Sierra Club, Prairie Rivers Network, and Friends of the Chicago River] have serious concerns with this decision. First, Illinois EPA

may be improperly characterizing some of these waters as treatment works. 35 Ill. Adm. Code 301.440 defines waters of the state to include all accumulations of water, surface and underground, and prohibits the use of natural waters as treatment works. Powerton Lake, for instance, was created in the Illinois River floodplain and should be considered a water of the state. In addition, Illinois DNR advertises many of these lakes (Braidwood, Powerton, Heidecke, Baldwin, LaSalle) as important for fishable/swimmable uses. As such, these lakes should not be removed from water quality assessment without a careful consideration of the history of these water bodies and how the public is using them.

Response: The Illinois EPA determined that these waters are "treatment works," based on the Illinois Pollution Control Board (IPCB) opinion (In the Matter of Water Quality and Effluent Standards Amendments, Cooling Lakes, Docket No. R75-2, page 3, September 29, 1975) and on information such as www.dnr.illinois.gov/Parks/Pages/HeideckeLake.aspx; Austen, D. J., J. T. Peterson, B. Newman, S. T. Sobaski, and P. B. Bayley, 1993; and, Compendium of 143 Illinois Lakes: bathymetry, physico-chemical features, and habitats and the Illinois Natural History Survey, Aquatic Ecology Technical Report 93/9. Furthermore, the Illinois EPA had already determined that Baldwin, Collins (Heidecke), Dresden, and LaSalle lakes are treatment works. The United States Environmental Protection Agency approved the Illinois EPA determination on August 15, 2003. (See Decision Document for the Approval of the Illinois 2002 303(d) list, P. 10.) Therefore, the Illinois EPA has properly determined these waters as "treatment works" and removed them from the 2002 and 2018 Section 303(d) lists.

11. The report makes clear that MBI, mIBI and fIBI data are generally used to determine if waters are impaired for aquatic life (Draft, p. 19).
    a. For which waters are MBI, mIBI and fIBI unavailable?
    b. If they are used, how are biological indexes used in connection with large rivers (the Illinois, Mississippi, and Ohio rivers) and how are they used with regard to waters with artificially altered stream flows?

Response: The Fish Index of Biological Integrity (fIBI) for Illinois streams is typically unavailable from the smallest and largest streams, including Illinois, Mississippi, and Ohio rivers. Illinois EPA primarily uses the fIBI in perennial streams that range in wetted width from about 10 to 150 feet.

Illinois EPA uses the Macroinvertebrate Biotic Index (MBI) in all sizes of streams, including the largest rivers. The Agency uses the Macroinvertebrate Index of Biological Integrity (mIBI) in most all sizes of streams (i.e., except for the largest rivers), in wadable areas of those streams where the specifically-required collection method can be applied.

Regarding the largest rivers, Illinois EPA uses the MBI (based on Hester-Dendy plate samplers) in the Illinois and Mississippi Rivers. However, assessments of attainment of Aquatic Life Use in these rivers are based primarily on physicochemical data. Illinois EPA does not use any of the Illinois-based biological indicators in Ohio River; however, assessments of attainment of Aquatic Life Use in Ohio River are based, in part, on biological indicators developed and used by the Ohio River Valley Water Sanitation Commission.

In Illinois streams, other than the largest rivers, all three Illinois biological indicators are used where stream flows are altered, including—but not limited to—channelized agricultural ditches and concrete-lined urban waterways. These indicators are used in altered-flow streams similar to how they are used in all other streams (see pages 19-23 in the draft 2018 Integrated Report).

12. Although most people would probably consider aquatic life in a water body to be impaired if the water body was dominated by invasive species (e.g., bighead carp or silver carp), it appears that the presence of invasive species was not taken into account in determining impairment. Is the dominance in a water body of invasive species considered or reflected in any way in the [draft 2018 Integrated Report]?

    Response: The Illinois EPA does not directly use relative abundances of non-native animals or plants to assess attainment of aquatic-life uses in Illinois lakes and streams. However, for streams, the presence and relative abundances of non-native fishes can influence the value of some metrics of the Illinois Fish Index of Biological Integrity, thus affecting the overall index score and our assessment of use attainment. For lakes, the abundance of non-native macrophytes can influence "Macrophyte Coverage" (see Table C-6 in the draft 2018 Integrated Report), which is a factor for assessing attainment of aquatic-life use.

    Regarding the assessment of Aesthetic Quality, although Illinois EPA does not typically inventory the specific types of plants or algae as part of the monitoring program, when applying the narrative standard, Illinois EPA does consider when overall plant or algal growth is from other than natural origin. Consequently, any such growth attributable to "invasive" plants or algae is addressed.

13. It appears that Illinois EPA has resolved the ongoing dispute with U.S. EPA regarding listings for total nitrogen by deciding not to list them pending a "final determination" by U.S. EPA (Draft, p.69), and only listing waters as impaired by forms of nitrogen other than ammonia if they violate the 10 mg/L standard applicable to drinking water sources (Draft, p.51). However, nitrate is known to affect aquatic life adversely at levels that are relevant to Illinois waters. See Minnesota Pollution Control Agency, "Developing Surface Water Nitrate Standards and Strategies for Reducing Nitrogen Loading" available at https://www.pca.state.mn.us/sites/default/files/wq-s6-23.pdf. This toxicity should be considered by Illinois EPA in the 305b/303(d) report.

    Response: The link provided appears to reference the Minnesota Pollution Control Agency's (MPCA) draft nitrate surface water quality standards which were developed in 2010 and have not yet been finalized.

    Despite not having any promulgated aquatic life standards or criteria for nitrate, Illinois EPA has been actively involved in the study of nitrate toxicity. Upon becoming aware of the draft MPCA nitrate standards, the Illinois EPA generated additional acute and chronic toxicity test results in 2011 via an intergovernmental agreement contract with the Illinois Natural History Survey (INHS). This data, along with additional data that was to be generated by MPCA and USEPA, was meant to fulfill deficiencies in the acute and chronic

nitrate toxicity datasets with the intent of developing Tier I acute and chronic criteria via the Subpart F procedures in 35 Ill. Adm. Code Part 302. To date, however, neither MPCA nor USEPA has released new nitrate data that would be available for use in standards/criteria development. At this time, the Illinois EPA does not believe the draft 2010 MPCA nitrate standards are suitable for use as aquatic life toxicity benchmarks for 305(b)/303(d) assessments, nor does Illinois EPA believe that the current nitrate dataset is sufficient for standards/criteria development in Illinois.

14. The Tropic State Index (TSI) appears to be an important component used to determine impairment of lakes. Where can the TSI be found in the report or any of its appendices?

    Response: Lake-specific TSI values used for assessing Illinois lake use attainment are available upon request. A full citation for the TSI is included in the Reference Section of the draft 2018 Integrated Report.

15. The report states that the narrative standards [of 35 Ill. Adm. Code 302.203, 302.403, and 302.515] apply only to protection of aesthetic quality in Illinois waters although many of the parameters of these standards, including plant or algal growth and turbidity, obviously affect aquatic life and one of the parameters, bottom deposits, often would only be visible to divers (Draft, p.15). It is claimed that this is due to IEPA's reading of several 1990 and 1997 Illinois Pollution Control Board [IPCB] decisions.

    a. What are the specific IPCB decisions in which these revisions were made?

       Response: The IPCB decisions are: R88-21, R97-25, and R88-21(A). Also, see 14 Ill. Reg. 2899, effective February 13, 1990, and 21 Ill. Reg. 1356, effective December 24, 1997.

    b. Were these revisions ever approved by USEPA pursuant to Section 303(c) of the Clean Water Act? If so, is this approval contained in documents that can be obtained by the public?

       Response: Yes. The approvals can be obtained through a Freedom of Information Act request. Please see https://www2.illinois.gov/epa/foia/Pages/default.aspx.

16. It is important to inform the public that waters in which [unnatural plant or algal growth] are present are not fully supporting of aquatic life. Some measure of chlorophyll a and vegetative mass should be incorporated into the measure of aquatic life use attainment.

    Response: Please refer to response to comment #20.

17. It appears that Illinois EPA is still using a mixture of measures of fecal coliform and [*Escherichia coli*] in making determinations. When does Illinois EPA intend to begin using [*Escherichia coli*] more broadly?

    Response: Illinois EPA is working with USEPA to evaluate the recreational uses of small, isolated rural surface waters and use that information to guide the adoption of appropriate recreation uses, criteria to protect those uses, and implementation strategies for facilities

discharging to such waters. Illinois EPA will then proceed with the adoption of new *Escherichia coli* (*E. coli*) water quality standards to protect recreational uses once the implementation strategies for small facilities discharging into small, isolated surface waters are developed.

18. Illinois EPA permit writers have been granting disinfection exemptions based on the alleged lack of use of waters for recreation below pathogen discharge sources. These exemptions are being made without measurement or science that clarifies the extent or distance downstream that the pathogens remain dangerous. If these unofficial use de-designations are to continue, they should at least be reflected in the 305b/303(d) report either as impairments of the general use below these discharges or as removals of the recreational use designation that is generally present for Illinois waters.

    Response: The extent or distance downstream that fecal coliform is above the water quality standard is the "unprotected reach." Illinois EPA uses a computer model to determine the "unprotected reach." The computer model uses the effluent flow and fecal coliform level along with stream-specific information in determining the "unprotected reach." When an *E. coli* standard is adopted, Illinois EPA will also change the year-round disinfection exemption approval process.

19. Fecal coliform is apparently the only factor considered in determining attainment of primary contact use (Draft, p. 45). This is not reasonable. People do not wish to swim, wade or even boat in waters that are choked with overgrown aquatic plants or are pea green. Some measure of chlorophyll a and vegetative mass should be incorporated into the measure of primary contact use attainment. Certainly, water bodies known to have suffered from HABs or unsafe levels of toxins from cyanobacteria must be listed as impaired. While admittedly few people consult the Illinois EPA 303(d) list before deciding where to go swimming, information about impairments, particularly impairments dangerous to humans and pets, could be utilized by local officials and others in designating recreation areas.

    Response: At this time, impairment decisions for Primary Contact use are based on pathogen indicators (e.g., fecal coliform or *E. coli* data). Lacking a numeric water quality standard for microcystin, Illinois EPA did not use microcystin data to make Primary Contact use impairment decisions; however, when microcystin values were found in a waterbody at or above 20 micrograms per liter, Illinois EPA notified the management entity and suggested that recreation-related uses be curtailed.

20. [The Illinois Chapter of the Sierra Club, Prairie Rivers Network, and Friends of the Chicago River] remain concerned regarding the manner in which violations of the narrative standards are determined. While perhaps a certain amount of "I know it when I see it" is unavoidable in applying portions of 35 Ill. Adm. Code 302.203, 302.403 and 302.515, any chlorophyll a reading above 60 ug/L certainly qualifies as an algal bloom. Measures for turbidity also exist. The Illinois EPA needs to use these measures in making determinations of aesthetic use attainability.

    Response: Illinois EPA acknowledges that opinions differ regarding how to interpret or apply the narrative standard at 35 Ill. Adm. Code 302.203. Although Illinois EPA does not

use specific numeric thresholds of chlorophyll *a* or other attributes to apply the standard, Illinois EPA does consider both benthic and sestonic algal growth when applying it.

21. Measures of toxins from cyanobacteria should be added to the list of pollutants considered in determining drinking water supplies. Waters known to have been impaired by cyanobacteria toxins at levels of concern should be listed even if the toxins did not appear in the finished drinking water at levels known to be dangerous.

    Response: When assessing attainment of Public and Food Processing Water Supply use, Illinois EPA compares concentrations of a substance, in untreated water, to the applicable Illinois Public and Food Processing Water Supply Standards (35 Ill. Adm. Code 302.304, 302.306) or to the applicable Maximum Contaminant Level threshold concentration (35 Ill. Adm. Code 611.300, 611.301, 611.310, 611.311, 611.325). These regulations do not specify a numeric threshold concentration for any cyanobacteria toxin (e.g., microcystin and cylindrospermopsin); therefore, Illinois EPA does not use toxin results for determining impairment or for identifying causes of impairment of Public and Food Processing Water Supply use.

22. The current schedule calls for 6 TMDLs per year (Draft, p. 67). In view of the length of the list of impaired waters, the rate of TMDL development should be greatly accelerated.

    Response: As outlined in the draft 2018 Integrated Report, development of TMDLs will be conducted on a watershed basis (i.e., USGS 10-digit hydrologic units) meaning that impaired waters upstream of a particular segment will have all TMDLs developed at the same time. Appendix A-3 of the draft 2018 Integrated Report shows, the two-year schedule for TMDL development in four watersheds and this translates into a potential for 15-20 TMDLs to be developed in that given time frame.

    Illinois EPA has developed more than 89 TMDL projects that address over 500 pollutants, and at this time TMDL development in several watersheds is in progress (11 watersheds – with 130 segment TMDLs). For more detailed information, please refer to Illinois Vision - Appendix A-5 - Long-Term Vision for Assessment, Restoration and Protection under Section 303(d) Program (https://www2.illinois.gov/epa/Documents/iepa/water-quality/watershed-management/tmdls/2018/303d-list/appendix-a-5.pdf). The Agency has also completed the Stage 1- TMDL development process for eight watersheds as part of the 2016 TMDL Development Cycle, and additional monitoring in support of the TMDL development process for these watersheds (Stage 2) is in progress.

    In addition, in 2018, Illinois EPA issued a Request for Proposal for TMDL Development - 2018 Vision TMDLs for eight watersheds (25 TMDLs), and the contract agreement with the TMDL Vendor is in progress. The Stage One TMDL development process will start once the contract is in place.

23. Review of the document is not straightforward. This is due, in part, to the inherent complexity of the material, but also because the raw data used to construct the report is invisible to the reviewer. As a result, reviewers are not able to make substantive comments based on a review of the data

used to make the determinations. Reviewers need access to data collection information, i.e. number of samples, magnitude and number of exceedances. It is impossible to know with any accuracy when and where samples were collected, or surveys carried out, or to identify whether our locally collected data would further enhance the report.

In terms of identifying where the surveys were carried out, the mean length of State assessment units in the DuPage River Salt Creek Workgroup (DRSCW) area is 4.8 miles and the longest is 12 miles; identifying sites is impossible. For stressors such as nuisance algae or dissolved oxygen, which can be products of highly localized conditions, such information is essential to formulate a management response. For example, algae thriving in an impoundment behind a dam or in an area exposed to high levels of sunlight would solicit a different management response than a three-mile segment filled with macrophytes.

It is increasingly important that this data become more available; the IR increasingly serves as the source of mandates for regulated agencies. Both the DRSCW and Lower DuPage River Watershed Coalition (LDRWC) have used IEPA-supplied data with great success in their Nutrient Implementation Plan (NIP) development and IPS update. It is our recommendation that such be made available for download from the Illinois EPA website.

Data beyond that used for the list of non-performing streams should also be made available. Most organizations do not have a budget to collect data from reference reaches. Detailed data on water quality, habitat and aquatic communities would be an enormous service to regulated agencies and watershed groups, who are working in partnership with the Illinois EPA to improve stream resource quality.

Response: Illinois EPA regrets that some users find the report difficult to use. The format of the report follows USEPA guidance for fulfilling the requirements of Sections 303(d), 305(b), and 314 of the federal Clean Water Act. Illinois EPA currently has no system, database, or website where the public can access all the data that we collect or use to make assessments. However, the public is welcome to request specific data from Illinois EPA, Bureau of Water, Surface Water Section. Illinois EPA will provide the requested information as expeditiously and completely as possible.

24. In the DRSCW (DuPage River Salt Creek Workgroup) and LDRWC (Lower DuPage River Watershed Coalition) watersheds, impairments caused by phosphorus include 1 segment for Aesthetic Quality and 18 segments for Aquatic Life. These segments were previously listed due to concentrations of phosphorus (TP) that fell above the 85th percentile of the State's TP dataset. This was applied due to the absence of a water quality standard for TP in river systems. This methodology is no longer described in the report text; however, the historic listings are still included in the 2018 report tables. These listings have consequences for permit holders that discharge to waterways sampled in the period during which this method was in force. The situation was arbitrary, unscientific and will be made further obsolete by the new tools Illinois EPA is developing to identify stream segments stressed by TP. We recommend that these legacy listings for TP be removed from the report system until IEPA develops its method for assessing streams for a TP impairment or the Illinois Pollution Control Board sets a water quality standard for TP.

Response: Please refer to response to comment #3.

25. Similarly, to TP, sedimentation/siltation listings were made if a data point fell above the 85th percentile of the State's dataset. The 2018 IR includes 12 segments within the DRSCW and LDRWC watersheds that are listed as impaired from sediment/siltation including 3 segments whose sedimentation/siltation listing is new for 2018: IL_GBL-02, IL_GBL-11, and IL_GNLL. Additionally, the DRSCW and LDWRC watersheds include 4 stream segments impaired by TSS. We recommend that the 9 legacy listings and 3 new listings for sedimentation/siltation and 3 legacy listings for TSS be removed from the 303d list until the IEPA develops its method for assessing streams for solids impairment or the Illinois Pollution Control Board (IPCB) sets applicable water quality standards for solids.

Response: Please refer to response to comment #3.

26. Aquatic algae and aquatic plants are included on [Table] B-2 Specific Assessment Information for Streams, 2018, as a cause for both aquatic life and aesthetic impairment. In the DRSCW and LDRWC watersheds there are 4 segments identified with an impairment caused by aquatic algae and 1 segment identified with an impairment caused by aquatic plants. The current method to list waterways as impaired for aquatic algae/plants is based on visual field observation of floating algae or fixed macrophytes, which is subjective and open to operator bias. Developing a more objective system for listing waterways for nuisance algae is recommended, particularly due to regulatory policy to impose specific permit limits based on this determination. As the DRSCW and LDRWC are charged with developing a NIP to address these specific stressors, access is needed to all documentation, including the 'Evaluate compliance with 35 Ill. Adm. Code 302.203[1] and 302.515[2]' ("Offensive Conditions" form), supporting the specific determinations in our watersheds and the protocols governing how the determination was made. The DRSCW would be willing to work with the Illinois EPA to develop a more objective mechanism for future evaluations.

Response: In order to meet the requirements of section 303(d) of the federal Clean Water Act, states must determine if waters are attaining water quality standards. Illinois EPA believes that in order to responsibly address the assessments that are based primarily on the "Offensive Conditions" narrative standard in 35 Ill. Adm. Code 302.515, the standard must be interpreted by Illinois EPA staff with knowledge of the natural expectations for lakes and streams. The presence of algae itself does not necessarily indicate that the standard is not attained. Since the Offensive Conditions standard lacks any strict numerical thresholds at this time, best professional judgment must be used to determine whether the narrative standard is being met or violated.

Regarding the comment about access to information, Illinois EPA currently has no system, database, or website where the public can access all of the data it collects or uses to make assessments. However, the public is welcome at any time to request specific data from Illinois

[1] Reference in the comment letter was incorrect, 35 Ill. Adm. Code 302.2031, and has been corrected.
[2] Reference in the comment letter was incorrect, 35 Ill. Adm. Code 302.5151, and has been corrected.

EPA, Bureau of Water, Surface Water Section or Groundwater Section. Illinois EPA will provide the requested information as expeditiously and completely as possible.

27. Methoxychlor is listed as a cause of the impairment for Aquatic Life on several segments in the DRSCW area. This pollutant is not listed in table C-5 (Guidelines for Identifying Potential Causes of Impairment of Aquatic Life Use in Illinois Streams). It is found in table C-22 (Guidelines for Identifying Potential Causes of Impairment of Public and Food Processing Water Supply). It is also listed in the State water quality standards under public and food processing water supply standards.

    The DRSCW has tested for Methoxychlor in the water column and in rivers sediment at multiple locations and has not detected this compound at concentrations that indicate it is a stressor to aquatic life. We request clarification for how it is being applied to aquatic life.

    The recently issued ILR 40 permit tasks the permit holder with sampling for pollutants listed on the most recent iteration of the State 303(d) List. We suggest that this not be applied to methoxychlor (and by the same logic hexachlorobenzene). Methoxychlor was banned from use nationally in 2003 and hexachlorobenzene was banned in 1966. It is not clear what further actions local government can take to abate these pollutants.

    Response: Illinois has no water quality standard for methoxychlor or hexachlorobenzene related to aquatic life. In previous cycles, these pollutants were listed based on guidelines of sediment concentrations. Illinois EPA discontinued the use of guidelines for listing causes of impairment because (1) they are not based on water quality standards, and (2) evidence is lacking linking specific sediment guidelines to aquatic life use impairment. Although Illinois EPA no longer uses these sediment guidelines, Illinois EPA does not intend to consider dissociating these past causes from all waters until USEPA acts on pending 303(d) listings. However, Illinois EPA will remove these causes when aquatic life use is assessed as fully supporting.

28. State water quality standards clearly identify sampling guidelines for determining compliance with the General Use water quality standard for fecal coliform:

    > "Notwithstanding the provisions of Section 302.209, in May through October, at no time shall the geometric mean, based on a minimum of five samples taken over not more than a 30 day period, of fecal coliform (STORET number 31616) exceed 200 per 100 mL, nor shall more than 10% of the samples during any 30 day period exceed 400 cfu per 100 mL in protected waters."

    However, as fecal coliform is not normally sampled at a frequency necessary to apply the General Use water quality standard, the state has developed alternative guidelines for assessing fecal coliform data for the purposes of 303d listing (Table C-16):

    > "No exceedances of the fecal coliform bacteria standard in the last five years and the geometric mean of all fecal coliform bacteria observations in the last five years

<200 cfu/100 mL and <10% of all observations in the last five years exceed 400 cfu/100 mL."

It is our opinion that streams should only be listed as impaired when there is available data to assess the stream in compliance with the approved water quality standard by having 5 samples collected within a 30-day period between May and October. If the State feels that the guidelines outlined in C-16 are the appropriate means of assessing attainment under the General Use standard for fecal coliform, then the water quality standards should be updated to reflect this methodology.

Response: The Illinois EPA acknowledges that our assessments of Primary Contact Use typically are not based on five samples collected in a 30-day period. Nonetheless, the Illinois EPA believes that our use assessment guidelines are reasonably applied. Moreover, for waterbodies on the 303(d) List that have fecal coliform identified as an impairment and are at the beginning of TMDL development, the Illinois EPA will conduct additional monitoring (May – October) to collect at least five samples in 30 days to confirm the impairment for the waterbody in accordance with the "geometric mean" requirements of Illinois Pollution Control Board regulations found 35 Ill. Adm. Code Section 302.209.

29. In Appendix A-1 and A-2, the [Hydrologic Unit Code] for Lacey Creek (IL_GNCC) and the Armitage Ditch (IL_GBLG) is noted as 712000410. As these streams are located in the DuPage River watershed, the HUC should be 712000408.

Response: The original question indicated the segment ID for Lacey Creek as IL_GNCC; however, the correct segment ID for Lacey Creek is IL_GBLC. Appendices A-1, A-2 and B-2 have been updated to address this comment. The Hydrologic Unit Codes for Lacey Creek (IL_GBLC) and Armitage Ditch (IL_GBLG) have been changed from 0712000410 to 0712000408.

30. On page 7 of the [draft 2018 Integrated Report] (IR), the Illinois EPA indicates that the state is now using the new Chicago Area Waterway System (CAWS) standards. Although [USEPA] has not yet approved them, the state can use these new standards in situations where the criteria in the new standards are more stringent than in the approved standards, or include criteria for parameters where there were no previously applicable criteria under the Indigenous Aquatic Life use.

Several of the CAWS waters have been delisted for pollutant impairments where the criteria in the new standards are less stringent than the currently approved standards. Until [USEPA] approves the new CAWS standards, the state should continue to use the currently-approved criteria where they are more stringent than the new criteria. The parameters for the new standards where this is the case are manganese, mercury, zinc, phenols, iron, silver and ammonia.

The new standards no longer contain criteria for barium, and oils, fats and grease. Causes of impairments in the CAWS have been removed from the impaired waters list based on the proposed standard. There are also several metals that were changed to a hardness-based equation, where the equation results in a less stringent criterion at higher hardness. Until [USEPA] formally approves the new standards, Illinois EPA should maintain impairments which are based on the currently approved standards, and use these criteria to make new listing decisions where criteria in the

currently approved standards are more stringent. Illinois EPA may wish to note those situations where pollutants may be removed in the future upon [USEPA] approval of the new standard. [USEPA] will continue working with the state to resolve any issues with approval of the new standard.

Response: Subsequent to the filing of this comment, USEPA has approved the CAWS rulemaking. With USEPA approval of the CAWS rulemaking on June 24, 2019, this comment has now become moot.

31. On page 71 of the [draft 2018 Integrated Report], Table C-34 includes the category "Indigenous Aquatic Life" (IAL). Based on the number of miles designated, it appears that this table includes both Bubbly Creek (IAL) and the rest of the CAWS (designated with the new CAWS Aquatic Life uses). Since the state is applying different criteria to the IAL use than to the CAWS uses, we recommend that you clarify how these uses are identified in Table C-34.

    Response: Please refer to response to comment #2.

32. On page 8 of the [draft 2018 Integrated Report], the state indicates that it "no longer consider[s] the following six lakes for integrated Clean Water Act 305(b)/303(d) reporting because in past reports, [it] did not correctly recognize them as treatment works (35 Ill. Adm. Code 301.415) that are not subject to the same regulations as other lakes." The six lakes listed by Illinois allow recreation including fishing and several of them allow boating at a minimum. Thus, these lakes should be monitored for the fish consumption and recreational uses and Illinois EPA should continue to assess these waters for its 303(d) list.

    Response: Please refer to response to comment #10.

33. On page 10 of the [draft 2018 Integrated Report], Illinois EPA identifies datasets that were received during the request for data. Illinois EPA states that data meeting Illinois EPA Quality Assurance/Quality Control requirements will be evaluated and considered for assessment in this report. Illinois EPA should also identify any datasets that were not used.

    Response: All submitted data met Illinois EPA Quality Assurance/Quality Control requirements and were evaluated and considered for assessment in the draft 2018 Integrated Report.

34. As stated in previous listing cycles, [USEPA] still has concerns with regard to Table C-1 on pages 21-22 of the [draft 2018 Integrated Report] that the state may not follow [USEPA] guidance concerning independent applicability in certain situations, in particular, the situations described in cells A2, B1, and D1[3]. The presumption should be that a water will be listed unless there is a case specific reason to justify not relying on a specific type of data (biological, chemical or habitat). If the biology or chemistry data is showing impairment, then the default should be the water is considered for listing. Box 8 at the end of the Table C-1 would allow the rationale for not including a water based on review of the data.

[3] See USEPA comments on the draft 2016 IR submitted Mach 1, 2016 - comment 1.

Response: Illinois EPA continues to believe that its weight-of-evidence approach provides the most accurate assessment of attainment of Aquatic Life Use. Illinois EPA assessments are based primarily on direct biological evidence, and Illinois EPA incorporates the use of water chemistry and habitat data as supporting evidence. For more related information, please see Illinois EPA's response to comment #16 in the 2012 Integrated Report and Section 303(d) List Responsiveness Summary. The link to the Responsiveness Summary for the 2012 Integrated Report is: https://www2.illinois.gov/epa/Documents/epa.state.il.us/water/tmdl/303-appendix/2012/appendix-f.pdf.

35. Near shore Lake Michigan segment IL_QLM-01 is no longer listed for Total Phosphorus. This segment is not included in the Appendix A-4 delistings. Please clarify if this segment should still be listed or provide a rationale in Appendix A-4 for the delisting.

Response: For the draft 2018 Integrated Report, Aesthetic Use for Lake Michigan segment IL_QLM-01 was assessed as Full Support. Therefore, total phosphorus will be delisted. Total phosphorus for segment IL_QLM-01 has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."

Addition to Appendix A-4 of the 2018 IR:

Appendix A-4. Segment/Causes removed from Illinois' 2016 Section 303(d) List

Segment AUID	*Water Body Name*	*Cause*	*Reason for Removal*	*2018 Category**
IL_QLM-01	*Lake Michigan Nearshore*	*Phosphorus (Total)*	*Applicable WQS attained; reason for recovery unspecified.*	*5*

** This column indicates the category for the entire water body. Any Category other than 5 represents a change from 2016.*

36. The waters identified in the table below were listed on the 2016 list. Please provide the rationale for these delistings or include these waters on the 2018 final Appendices A1 and A2.

Response: See Table 2 on page F-25.

37. The causes of impairment identified in the table below were listed on the 2016 list. Please provide the rationale for these delisting or include these causes of impairments on the 2018 final Appendices A1 and A2.

Response: See Table 3 on pages F-26 to F-28.

38. The following water/impairment combinations are noted to be delisted from the 2016 list, however they do not appear to be identified on the 2016 final Appendices A1, and A2. Please confirm whether or not they are on the final 2016 Appendices A-1 and A-2. If not, we recommend they be removed from the final 2018 Appendix A-4 (delistings from the 2016 list).

Response: See Table 4 on pages F-29 to F-30.

39. Waterbody/impairments which are identified on 2016 list and identified on the 2018 Appendix A1 and A2 as being listed but also identified on Appendix A-4 as being delisted. Please confirm if these should or should not be delisted.

Response: See Table 5 on page F-31.

40. Please confirm the segment ID for Sinsinawa River for the 10.66 miles. The segment was identified as IL_MS on the 2016 list. On the 2018 list, it is identified as IL_MS-01. If these are not the same segment, then IL_MS from the 2016 list needs to be identified as delisted on Appendix 4-A with the rationale for removal or retained on the 2018 list.

Response: In a conference call with USEPA on August 28, 2018, it was clarified by Illinois EPA staff that stream segment IL_MS no longer exists in the draft 2018 Integrated Report as it was split into new segments IL_MS-01 and IL_MS-02. Subsequent to the clarification, USEPA's recommendation was to incorporate into "Appendix A-4. Segment/Causes removed from Illinois' 2016 Section 303(d) List," a row of information explaining the removal of IL_MS. That recommendation was followed.

41. In review of the waters listed in the revised public notice, Illinois identified the waterbody segment and the action of adding or deleting an impairment for that segment. For the waters where an impairment was identified as being deleted, please identify the cause of the deletion based on the applicable rationale in Illinois' [draft 2018 Integrated Report] methodology, as indicated beginning on page 68 of the [draft 2018 Integrated Report]. Please include these waters and rationales in Appendix A-4 in the final submittal of the 2018 Integrated Report.

    It is assumed delisted impairments/waters, and rationales, and added impairments for the 33 waters will be incorporated into the appropriate appendix in the final submittal of the 2018 Integrated Report.

Response: Appendices A-1, A-2, and A-4 have been updated to address these comments.

42. Segment IL_ATG-03 was delisted in the original public notice for Chloride, DO, TP, sedimentation/siltation, and TSS with additional impairments added for Iron and pH. This segment was identified in the extended public noticed deleting the newly added listings for Iron and pH, but it is indicated that the segment is not supporting for ALU. What is the pollutant causing the segment to not support the designated use?

Response: Assessment Unit IL_ATG-03 is in Category 4C, caused by a non-pollutant, and included in Appendix A-7 as alteration in stream-side or littoral vegetative covers, changes in stream depth and velocity patterns, loss of instream cover, and other flow regime alterations.

43. Segment IL_ATHG-01 was not on the final 2016 list. Is the delisting correct for this segment, or are the pollutants related to another segment?

    Response: The pollutants manganese and sulfates for Assessment Unit IL_ATHG-01 were associated with an approved TMDL (Sugar Creek (ATHG-01), approved July 18, 2008) and the segment placed in Category 4A, TMDL completed. That is why the segment did not show up on the final 303d list for 2016.

44. Segment IL-CD-01, Elm River was not on the final 2016 list for manganese. Please confirm that the data used to delist for manganese is the correct segment. This segment is on the 2018 original public notice for Aquatic life use due to TP and fish consumption for mercury.

    Response: The pollutant manganese for Assessment Unit IL_CD-01 was associated with an approved TMDL (Elm River (CD 01) approved August 15, 2008). The segment is still in Category 5 but the pollutant has been placed in Category 4A, TMDL completed, explaining why the segment did not show up on the final 303d list for 2016. In the updated 2018 review of water quality data, manganese standards have been achieved.

45. Segment IL_JN-02 Cahokia Canal is not on the final 2016 list for DO. Please confirm that the data used to delist for DO is the correct segment. This segment is on the 2018 original public notice list for Aquatic life use due to Iron, Manganese, TP, sedimentation/siltation, and TSS. On the extended public notice it is being delisted for manganese.

    Response: Based on an approved TMDL for Cahokia Canal on August 20, 2009, and analysis of existing data for assessment unit IL_JN-02, it was determined the impairment of low dissolved oxygen to be caused by low flow conditions and not a pollutant. Illinois EPA's mechanism used to address where a TMDL determined that low dissolved oxygen is not caused by a pollutant is to change the classification of that dissolved oxygen cause to a non-pollutant thus removing it from the 2016 303(d) list. In the updated 2018 review of water quality data, dissolved oxygen standards have been attained.

Acronyms and Abbreviations

Agency or Illinois EPA or IEPA	Illinois Environmental Protection Agency
ALU	Aquatic Life Use
CAWS	Chicago Area Waterway System
CDOM	Continuous Dissolved Oxygen Monitoring
CFAR	Illinois Council on Food and Agricultural Research
cfu	Colony forming units
DO	Dissolved Oxygen
DRSCW	DuPage River Salt Creek Workgroup
HAB	Harmful Algal Bloom
IAL	Indigenous Aquatic Life
IAWA	Illinois Association of Wastewater Agencies
Illinois DNR	Illinois Department of Natural Resources
INHS	Illinois Natural History Survey
IPCB	Illinois Pollution Control Board
IR	Integrated Report
fIBI	Fish Index of Biological Integrity
LDRWC	Lower DuPage River Watershed Coalition
MBI	Macroinvertebrate Biotic Index
mg/L	Milligrams per Liter
mL	Milliliter
mIBI	Macroinvertebrate Index of Biological Integrity
MPCA	Minnesota Pollution Control Agency
MWRDGC	Metropolitan Water Reclamation District of Greater Chicago
NIP	Nutrient Implementation Plan
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TSI	Tropic State Index
TSS	Total Suspended Solids
ug/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

Distribution of Responsiveness Summary

A letter announcing the completion of this Responsiveness Summary and its availability on the Agency website was mailed or emailed to all on the contact list for the draft 2018 Integrated Report and to all who submitted comments. Additional copies of this Responsiveness Summary are available from Shirley Durr, Illinois EPA, e-mail Shirley.Durr@illinois.gov, phone 217-782-3362.

Agency Staff Who Can Answer Your Questions

Questions concerning the 2018 Integrated Report:

Questions about the 2018 Integrated Report.....Chris Davis or Gregg Good ...(217)782-3362

Legal Procedures.....Stefanie Diers.....(217)782-5544

The full 2018 Integrated Report (including appendices, Appendix F is this Responsiveness Summary) and other documents associated with the report are available on the Illinois web site:

https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx

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Table 1. Addendum to Response #1

Stream Name	Cycle-2018 Assessment Unit	Cycle-2018 Impaired Use	Basis for Use Impairment	Documentation of Basis for Use Impairment	Cycle-2018 Pollutant Cause of Impairment	Basis for Cause	Documentation of Basis for Cause
Crooked Creek	IL_OJ-07	Aquatic Life	Assessment Methodology guidelines not met for Aquatic Life Use.	Field-data observations and readings. Water-sample lab results. Fish- and macroinvertebrate-assemblage results. Physical-habitat observations and results.	Phosphorus (Total)	Phosphorus concentration exceeds Assessment Methodology cause guideline.	Water-quality results/information for Station OJ-07
					Oxygen, Dissolved	Dissolved-oxygen concentration does not meet Assessment Methodology cause guideline.	Continuous-monitoring results/information for Station OJ-12
Crooked Creek	IL_OJ-08	Aquatic Life	Assessment Methodology guidelines not met for Aquatic Life Use.	Field-data observations and readings. Water-sample lab results. Fish-assemblage results. Physical-habitat observations and results.	Phosphorus (Total)	Phosphorus concentration exceeds Assessment Methodology cause guideline.	Water-quality results/information for Station OJ-08
					Total Suspended Solids (TSS)	TSS concentration exceeds Assessment Methodology cause guideline.	Water-quality information for Station OJ-08.
		Aesthetic Quality	35 IAC 302.203 "Offensive Conditions" not attained: color, turbidity	Field-data observations	Color	Color does not meet Assessment Methodology cause guideline.	Field-data observations for Stations OJ-06 and OJ-08.
					Turbidity	Turbidity does not meet Assessment Methodology cause guideline.	
Crooked Creek	IL_OJ-11	Aquatic Life	Assessment Methodology guidelines not met for Aquatic Life Use.	Field-data observations and readings. Macroinvertebrate-assemblage results. (See 1997 Facility Related Stream Survey report for Salem wastewater-treatment facility)	Oxygen, Dissolved	Dissolved-oxygen concentration does not meet Assessment Methodology cause guideline.	1997 Facility Related Stream Survey report for Salem wastewater-treatment facility.
Grand Point Creek	IL_OJC-01	*<new Assessment Unit; uses not yet assessed; sampling planned for 2019>*					
Grand Point Creek	IL_OJC-03	Aquatic Life	35 IAC 302.203 "Offensive Conditions" not attained: algae, bottom deposits Assessment Methodology guidelines not met for Aquatic Life Use	Field-data observations and readings. Water-sample lab results. Fish- and macroinvertebrate-assemblage results. Physical-habitat observations and results.	Aquatic Algae	Algae does not meet Assessment Methodology cause guideline.	Field-data observations (Station OJC-03)
					Sedimentation/Siltation	Sedimentation/siltation does not meet Assessment Methodology cause guideline.	
					Oxygen, Dissolved	Dissolved-oxygen concentration does not meet Assessment Methodology cause guideline.	Field-data information for Station OJC-03.
Sewer Creek	IL_OJCB-19	Aquatic Life	Assessment Methodology guidelines not met for Aquatic Life Use	Field-data observations and readings. Macroinvertebrate-assemblage results. (See 1997 Facility Related Stream Survey report for Centralia wastewater-treatment facility)	Phosphorus (Total)	Phosphorus concentration exceeds Assessment Methodology cause guideline.	1997 Facility Related Stream Survey report for Centralia wastewater-treatment facility.
					Sedimentation/Siltation	Sedimentation/siltation exceeds Assessment Methodology cause guideline	
Sewer Creek	IL_OJCB-20	*<no impaired uses>*					

Table 2. Addendum to Response #36

Hydrologic Unit Code	Water Name	Assessment ID	Water Size	Designated Use	2016 Cause of Impairment	USEPA Concern	Illinois EPA Response
Lake Michigan Open Water	Calumet Harbor	IL_3S	2.40 Square Miles	Fish Consumption	Mercury	This water was on the 2016 list for mercury. It is not on the 2018 list or on Appendix A-4.	For the 2016 Integrated Report, Fish Consumption Use for Calumet Harbor segment IL_3S was assessed as Not Supporting for Mercury. However, for the 2018 Integrated Report it was determined that segment IL_3S is within Indiana waters not Illinois waters; thus, segment IL_3S no longer exists. Therefore, Mercury for segment IL_3S has been added to Appendix A-4 with the reason for removal being, "For the 2018 Integrated Report it was determined that segment IL_3S is within Indiana waters not Illinois waters."
Lake Michigan Water	Calumet Harbor	IL_3S	2.40 Square Miles	Fish Consumption	Polychlorinated biphenyls (PCBs)	This water was on the 2016 list for PCBs. It is not on the 2018 list or on Appendix A-4.	For the 2016 Integrated Report, Fish Consumption Use for Calumet Harbor segment IL_3S was assessed as Not Supporting for PCBs. However, for the 2018 Integrated Report it was determined that segment IL_3S is within Indiana waters not Illinois waters; thus, segment IL_3S no longer exists. Therefore, PCBs for segment IL_3S has been added to Appendix A-4 with the reason for removal being, "For the 2018 Integrated Report it was determined that segment IL_3S is within Indiana waters not Illinois waters."
0713001201	GILLESPIE NEW	IL_SDU	207.00 Acres	Aesthetic Quality	Cause Unknown	This water was on the 2016 list for cause unknown. It is not on the 2018 list or on Appendix A-4.	For the 2018 Integrated Report, Aesthetic Quality Use for Gillespie New segment IL_SDU was assessed as Not Supporting for other impairments but not Cause Unknown. Therefore, Cause Unknown will be delisted. Cause Unknown for segment IL_SDU has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000115	South Branch Rock Creek	IL_FFB-01	19.82 Miles	Aquatic Life	pH, Phosphorus (Total)	This water was on the 2016 list for pH, TP. It is not on the 2018 list or on Appendix A-4.	For the 2018 Integrated Report, Aquatic Life Use for South Branch Rock Creek segment IL_FFB-01 was assessed as Fully Supporting. Therefore, Total Phosphorus and pH will be delisted. Total Phosphorus and pH for segment IL_FFB-01 have been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."

Table 3. Addendum to Response #37

Hydrologic Unit Code	Water Name	Assessment ID	Water Size	Designated Use	2016 Cause of Impairment	USEPA Concern	Illinois EPA Response
711000105	Bear Creek	IL_KI-05	12.69 Miles	Aquatic Life	Oxygen, Dissolved (DO)	DO was listed as a cause of impairment on the 2016 list. This water is not on the 2018 list for DO and not on Appendix A-4 for DO. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aquatic Life Use for Bear Creek segment IL_KI-05 was assessed as Not Supporting for other impairments but not DO. Therefore, DO will be delisted. DO for segment IL_KI-05 has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000610	CEDAR (LAKE)	IL_RTK	302.00 Acres	Aesthetic Quality	Phosphorus (Total)	TP was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for TP and not on Appendix A-4 for TP. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Cedar Lake segment IL_RTK was assessed as Fully Supporting. Therefore, TP will be delisted. TP for segment IL_RTK has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000610	CROSS	IL_UTV	88.91 Acres	Aesthetic Quality	Cause Unknown	Cause Unknown was listed as a cause of impairment on the 2016 list. This water is not on the 2018 list for Cause Unknown and not on Appendix A-4 for Cause Unknown. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Cross segment IL_UTV was assessed as Not Supporting for other impairments but not Cause Unknown. Therefore, Cause Unknown will be delisted. Cause Unknown for segment IL_UTV has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0706000503	Galena River	IL_MQ-01	8.62 Miles	Aesthetic Quality	Bottom Deposits	Bottom Deposits was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for Bottom Deposits and not on Appendix A-4 for Bottom Deposits. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Galena River segment IL_MQ-01 was assessed as Fully Supporting. Therefore, Bottom Deposits will be delisted. Bottom Deposits for segment IL_MQ-01 has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."

Table 3. Addendum to Response #37 (continued)

0712000610	LAKE MATTHEWS	IL_UTA	9.00 Acres	Aesthetic Quality	Phosphorus (Total)	TP was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for TP and not on Appendix A-4 for TP. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Lake Matthews segment IL_UTA was assessed as Not Supporting for other impairments but not TP. Therefore, TP will be delisted. TP for segment IL_UTA has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000304	Little Calumet River North	IL_HA-05	5.02 Miles	Indigenous Aquatic Life	Oxygen, Dissolved, Phosphorus (Total), Silver	DO, TP and Silver were listed as causes of impairment on the 2016 list. This water is not on the 2018 list for DO, TP and Silver and not on Appendix A-4 for DO, TP and Silver. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Indigenous Aquatic Life Use for Little Calumet River North segment IL_HA-05 was assessed as Fully Supporting. Therefore, DO, TP and Silver will be delisted. DO, TP and Silver for segment IL_HA-05 has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000610	LITTLE SILVER	IL_STC	41.00 Acres	Aesthetic Quality	Cause Unknown	Cause Unknown was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for Cause Unknown and not on Appendix A-4 for Cause Unknown. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Little Silver segment IL_STC was assessed as Not Supporting for other impairments but not Cause Unknown. Therefore, Cause Unknown will be delisted. Cause Unknown for segment IL_STC has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000209	Prairie Creek	IL_FLG	29.72 Miles	Aesthetic Quality	Bottom Deposits	Bottom Deposits was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for Bottom Deposits and not on Appendix A-4 for Bottom Deposits. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Prairie Creek segment IL_FLG was assessed as Fully Supporting. Therefore, Bottom Deposits will be delisted. Bottom Deposits for segment IL_FLG has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0713000306	SPRING NORTH	IL_SDZM	578.00 Acres	Aesthetic Quality	Cause Unknown	Cause Unknown was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for	For the 2018 Integrated Report, Aesthetic Quality Use for Spring North segment IL_SDZM was

Table 3. Addendum to Response #37 (continued)

						Cause Unknown and not on Appendix A-4 for Cause Unknown. However, this water is listed on the 2018 list for other impairments.	assessed as Not Supporting for other impairments but not Cause Unknown. Therefore, Cause Unknown will be delisted. Cause Unknown for segment IL_SDZM has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0713000306	SPRING SOUTH	IL_RDQ	610.00 Acres	Aesthetic Quality	Cause Unknown	Cause Unknown was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for Cause Unknown and not on Appendix A-4 for Cause Unknown. However, this water is listed on the 2018 list for other impairments.	For the 2018 Integrated Report, Aesthetic Quality Use for Spring South segment IL_RDQ was assessed as Not Supporting for other impairments but not Cause Unknown. Therefore, Cause Unknown will be delisted. Cause Unknown for segment IL_RDQ has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified."
0712000408	West Branch Du Page River	IL_GBK-09	11.86 Miles	Aesthetic Quality	Phosphorus (Total)	TP was listed on the 2016 list as Aesthetic Quality cause of impairment. This water is not on 2018 list for TP-Aesthetic Quality or Appendix A-4. However, this water is listed on the 2018 list for other impairments, including TP for Aquatic life.	For the 2018 Integrated Report, Aesthetic Quality Use for West Branch Du Page River segment IL_GBK was assessed as Fully Supporting. Therefore, TP will be delisted. TP for segment IL_GBK has been added to Appendix A-4 with the reason for removal being, "Applicable WQS attained; reason for recovery unspecified." However, this segment is listed on the 2018 report as impaired for TP for Aquatic Life Use.
0709000313	Yellow Creek	IL_PWN-02	30.63 Miles	Aquatic Life	Bottom Deposits	Bottom Deposits was listed as cause of impairment on the 2016 list. This water is not on the 2018 list for Bottom Deposits and not on Appendix A-4 for Bottom Deposits. However, this water is listed on the 2018 list for other impairments.	For the 2016 Integrated Report, Aquatic Life Use for Yellow Creek segment IL_PWN-02 was assessed as Not Supporting for Bottom Deposits and Dissolved Oxygen. Bottom Deposits was incorrectly listed as a Cause of Aquatic Life Use Impairment. This was corrected for the 2018 Integrated Report, Aquatic Life Use for Yellow Creek segment IL_PWN-02 is listed as Not Supporting for Dissolved Oxygen.

Table 4. Addendum to Response #38

Hydrologic Unit Code	Assessment ID	Water Body Name	Cause delisted	Reason for Removal	USEPA Concern	Illinois EPA Response
0714010608	IL_ND-01	Crab Orchard Creek	Fecal Coliform	TMDL approved or established by EPA (4A)	Not on the 2016 list for Fecal Coliform. Segment on 2018 list for other pollutants	The cause Fecal Coliform for Assessment ID IL_DN-01 was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0714020409	IL_O-20	Kaskaskia River	Fecal Coliform	TMDL approved or established by EPA (4A)	Not on the2016 list for Fecal Coliform. Segment on 2018 list for other pollutants	The cause Fecal Coliform for Assessment ID IL_O-20 was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
Lake Michigan Beaches	IL_QI-06	Lake Bluff Beach	*Escherichia coli*	TMDL approved or established by EPA (4A)	Not on the 2016 list for *Escherichia coli*. Segment on 2018 list for other pollutants	The cause *Escherichia coli* for Assessment ID IL_QI-06 was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0512011409	IL_C-33	Little Wabash River	Atrazine	TMDL approved or established by EPA (4A)	Not on 2016 list for Atrazine. Segment on 2018 list for other pollutants	The cause Atrazine for Assessment ID IL_C-33 was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0512011401	IL_RCF	MATTOON	Simazine	TMDL approved or established by EPA (4A)	Not on the 2016 list for Simazine. Segment on 2018 list for other pollutants	The cause Simazine for Assessment ID IL_RCF was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0714010101	IL_RJF	MT. OLIVE NEW	Atrazine	TMDL approved or established by EPA(4A)	Not on the 2016 list for Atrazine. Segment on 2018 list for other pollutants	The cause Atrazine for Assessment ID IL_RJF was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0714010101	IL_RJG	MT. OLIVE OLD	Atrazine	TMDL approved or established by EPA (4A)	Not on the 2016 list for Atrazine. Segment on 2018 list for other pollutants	The cause Atrazine for Assessment ID IL_RJG was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0714010101	IL_RJG	MT. OLIVE OLD	Manganese	TMDL approved or established by EPA (4A)	Not on the 2016 list for Manganese. Segment on 2018 list for other pollutants	The cause Manganese for Assessment ID IL_RJG was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.

Table 4. Addendum to Response #38 (continued)

0512011401	IL_RCG	PARADISE (COLES)	Simazine	TMDL approved or established by EPA (4A)	Not on the 2016 list for Simazine. Segment on 2018 list for other pollutants	The cause Simazine for Assessment ID IL_RCG was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0512011401	IL_RCE	SARA	Phosphorus (Total)	TMDL approved or established by EPA (4A)	Not on the 2016 list of TP. Segment on 2018 list for other pollutants	The cause Total Phosphorus for Assessment ID IL_RCE was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.
0512011119	IL_B-06	Wabash River	Fecal Coliform	TMDL approved or established by EPA (4A)	Not on the 2016 list for Fecal coliform. Segment on 2018 list for other pollutants	The cause Fecal Coliform for Assessment ID IL_B-06 was delisted in a previous assessment cycle and has been removed from Appendix A-4 of the 2018 Integrated Report.

Table 5. Addendum to Response #39

Hydrologic Unit Code	Assessment ID	Water Body Name	Cause delisted	Reason for Removal	USEPA Concern	Illinois EPA Response
0712000610	IL_DT-35	Fox River	Fecal Coliform	Applicable WQS attained; reason for recovery unspecified	Segment on 2018 list for other pollutants	Primary Contact Recreation Use information was entered incorrectly for cause Fecal Coliform for Assessment ID IL_DT-35 changing the use support from Not Supporting to Fully Supporting and delisting the segment. This was corrected for the 2018 Integrated Report; Primary Contact Recreation Use for Fox River was changed back to Not Supporting and Fecal Coliform for IL_DT-35 has been removed from Appendix A-4 of the 2018 Integrated Report
0714010607	IL_NF-01	Hurricane Creek	Lindane	Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)	Segment on 2018 list for other pollutants	The cause Lindane for Assessment ID IL_NF-01 was delisted in error. This was corrected for the 2018 Integrated Report; Aquatic Life Use for Hurricane Creek was assessed as Not Supporting and Lindane for IL_NF-01 has been removed from Appendix A-4 of the 2018 Integrated Report