

**Illinois Environmental Protection Illinois EPA**

Bureau of Water

Water Quality Standards Section - Division of Water Pollution Control

**January 19, 2024**

**Summary and Agency Statement  
For  
2023 Triennial Review**

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## BACKGROUND

The Illinois Environmental Protection (Illinois EPA) Bureau of Water is conducting a triennial review of the State's Water Quality Standards (WQS) as required by 40 CFR 131.20 and consistent with the Clean Water Act (CWA) Section 303(c)(1). The purpose of the triennial review is to assess, develop, update, and revise WQS once every three years in accordance with the CWA.

Illinois EPA has prepared this Summary and Agency Statement as part of its 2023 Triennial Review process. This document includes:

1. the Illinois EPA's decision on topics to work on in the next 3 years;
2. a summarized compilation of public input, that is, questions, comments, and suggestions that were received during the Illinois EPA's July 6, 2023, triennial review public hearings and May 10, 2023, through September 7, 2023, comment period; and
3. the Illinois EPA's response to public input.

## PUBLIC OUTREACH

A public comment period is intended to provide an opportunity for the public to understand and comment on a proposed action. On May 10, 2023, the Illinois EPA published a notice of public hearing and public comment period, which began on May 10, 2023, was extended for an additional 30 day period, and ended on September 7, 2023, (refer to: <https://epa.illinois.gov/topics/water-quality/standards/triennial-review.html>). This document provides written responses to comments raised during the public comment period.

Based on significant public interest in this matter, an informational public hearing was conducted virtually (online) in accordance with the applicable regulations found at 35 Ill. Adm. Code 395.206 on the Illinois EPA public notice webpage (<https://epa.illinois.gov/public-notices/general-notices.html>), as well as forwarded to numerous elected officials and persons known to be interested in the matter - including representatives from various environmental advocacy groups.

The notice of public comment period and public hearing included instructions for participation in the public hearing, Illinois EPA contacts (either the Hearing Officer or the Office of Community Relations) for any questions or concerns (e.g., requests for interpretation, informational or special needs, assistance with WebEx), in addition to the link to the Illinois EPA Triennial Review webpage and link to the online survey to facilitate the selection and ranking of project topics for the next three years.

An afternoon and evening online public hearing was conducted on July 6, 2023, to explain the triennial review process, present potential project topics, answer questions and accept comments from the public. The first online public hearing began at 2:00 pm CST and ended at 3:34 pm CST. The second public hearing began at 6:01 pm CST and ended at 7:10 pm CST. Altogether, there were sixty participants (excluding Illinois USEPA staff) that attended and 4 participants that commented. A recording of the public hearing and Illinois USEPA public hearing statements were posted on the Illinois EPA website (refer to <https://epa.illinois.gov/topics/water-quality/standards/triennial-review.html>).

The Illinois EPA received 10 written submissions during the public comment period, which began on May 10, 2023, and ended on September 7, 2023. The Illinois EPA on extended the issuance of the Summary and Agency Statement on December 6, 2023, and again on January 19, 2024. This

extension provided the Agency time to perform a “workload analysis” of the project topics. This document provides written and oral responses raised during the public comment period and during the public hearing sessions.

## ILLINOIS EPA DECISION

After careful consideration of the public comments and availability of the Illinois EPA resources, the Illinois EPA will be working on the following topics over the next three years:

Propose Updates to Subpart F: Procedures for Determining Water Quality Criteria (35 Ill. Adm. Code 302.210)
Evaluate Designated Recreational Uses: <ul style="list-style-type: none"><li>- Chicago Sanitary and Ship Canal from the confluence of Bubbly Creek to the confluence of the Calumet-Sag Channel</li><li>- South Fork of the South Branch Chicago River (Bubbly Creek)</li></ul>
Address US EPA Disapprovals for Chicago Area Waterway System (CAWS)\Recreation (R2008-009(A)) <ul style="list-style-type: none"><li>- Upper North Shore Channel from the Wilmette Pumping Station to Northside Water Reclamation Plant</li><li>- Calumet River from Lake Michigan to the O’Brien Lock and Dam</li><li>- Chicago Sanitary and Ship Canal from its Confluence with the Calumet-Sag Channel to its Confluence with the Des Plaines River</li><li>- Lower Des Plaines River from its Confluence with the Chicago Sanitary and Ship Canal to the Brandon Road Lock and Dam</li></ul>

The decision to work on these three topics were based on:

- an evaluation of the online survey results through which the public was provided the opportunity to rank topics that it considers important,
- public comments and US EPA comments,
- extensive discussions internal to the Illinois EPA,
- extensive discussions with US EPA.

The public ranked *Propose Updates to Subpart F and Evaluate Designated Recreational Uses* as the top two topics in the triennial review online survey during the comment period of July 6, 2023, through September 7, 2023. The topic *Address USEPA Disapprovals for Chicago Area Waterway System (CAWS)\Recreation* emerged as the 5th by public ranking, but also as Illinois EPA’s top priority based on discussions within the Illinois EPA and US EPA. Going forward, the Illinois EPA will be working on the selected topics over the next three years.

The Illinois EPA will also conduct preliminary research on unselected topics, focusing on potential resources needed and implementation intricacies, to enhance its ability to address the remaining topics efficiently and effectively in the future.

Copies of pertinent documents (Overview of Triennial Review Process, and Summary and Illinois EPA Statement) can be obtained from the contact listed at the conclusion of this document or from the

Illinois EPA website. The complete repository of documents for this action are available at the Illinois EPA office in Springfield, Illinois, which can be obtained through a Freedom of Information Act (FOIA) request to the Illinois EPA. This can be done through our website.

<https://www2.illinois.gov/epa/foia/Pages/default.aspx> You can also contact the Illinois EPA if you need help with this request.

## ILLINOIS EPA RESPONSES TO COMMENTS, QUESTIONS, AND CONCERNS

Comments are separated by project topics. Comments are stated first followed by Illinois EPA responses in **BOLD FONT**. Comments are depicted in a condensed summary or paraphrased form, rather than recited in full.

### 1. Evaluate Designated Recreational Use (CSSC)

- a. Cicero Community Farm and Ms. Barajas are requesting that Illinois EPA prioritize the CSSC and nearby Cicero community in its triennial review and implement water quality standards (WQS) that limit fecal coliform and E.coli to support the increasing recreational use of the CSSC near the Stickney facility. In reviewing WQS, ILLINOIS EPA can and should consider both public input and changes in circumstance that may affect the attainability of applicable WQS. During this review, states must reexamine any waterbodies for which the WQS do not include the goal uses specified in CWA § 101(a)(2) including “providing for recreation in and on the water.” If new information indicated that such uses are attainable, states must revise their WQS to reflect those uses. Moreover, while ILLINOIS EPA did not include this portion of the CSSC on its original priority project list, US EPA recommends that states conduct a detailed WQS review for waterbodies when one or more of the following occurs:
  - The state or tribe has identified toxic or other pollutants, such as nutrients, which may be precluding attainment of a designated use or posing an unreasonable risk to human health.
  - Pollutants could have potential adverse impacts on threatened or endangered species.
  - National Pollutant Discharge Elimination System permits containing water quality-based effluent limits are scheduled to be issued or reissued.
  - Funding decisions for combined sewer overflows are pending.
  - The public has expressed [interest] in having the state review the WQS that are applicable to a particular waterbody.

Not only does the existence of fecal coliform, namely E.coli, in these waters preclude the attainment of a higher designated use, but CCF has also been continuously expressing interest in having the state review the WQS applicable to this waterbody. Cicero community members have been raising concerns over the lack of disinfection at the MWRDGC Stickney Plant as early as October 2016, again in 2017 and 2019, and now in this proceeding. For its part, ILLINOIS EPA has failed to conduct a timely triennial review of the water quality standards that should apply to the CSSC, the receiving water for MWRDGC’s wastewater. In the absence of this review, ILLINOIS EPA does not have a legally adequate, contemporary evaluation of the present-day use and value of this waterway for its recreational purpose. The preamble to the Water Quality Standards

Regulation specifically states that “even though it may not make sense to encourage use of a stream for swimming because of the flow, depth or the velocity of the water, the States and US EPA must recognize that swimming and/or wading may occur anyway. In order to protect public health, States must set criteria to reflect recreational uses if it appears that recreation will in fact occur in the stream.” “Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.”

In recent years, residents of Cicero and other nearby communities have been increasingly using the CSSC for recreational uses.

- b. This is an EJ community. Stickney plant discharges waste that is not disinfected into the Chicago Sanitary and Ship Canal. This area is used for recreating. There are boat launches, rowing teams, which use the water, and fishing. There is a pending permit NPDES IL0028053. Commenter has requested ILLINOIS EPA to conduct an EJ analysis as part of permitting process. This was request in 2019 during the NPDES public comment period. The commenter is formally requesting Illinois EPA to conduct a full EJ analysis alongside the triennial review. The Chicago Sanitary and Ship Canal should be prioritized, and E. coli and fecal coliform should be limited in the canal. Recreations of the canal are inconsistent with the Stickney plant. The commentor would like to see disinfection.

**Response: Thank you for the comment. Due to public interest and its significance, the Illinois EPA will be working on this topic during this triennial review period. Input from stakeholders will be solicited during the triennial review period.**

## **2. Adopt Harmful Algae Blooms (HABs) Water Quality Standards (WQS)**

Illinois does not currently have a WQS for HABs or algal toxins. In addition to developing numeric nutrient criteria for rivers, lakes, reservoirs, and streams, it would be helpful to adopt WQS for algal toxins (microcystin and cylindrospermopsin) to protect human health (recreation and drinking water). Harmful algae blooms (HABs) are a rising threat to many rivers, streams, lakes, and other Illinois waters. The frequency and severity of algae blooms and HABs is escalating due to uncontrolled nutrient runoff and climate change. HABs pose a growing threat to public health, the aquatic environment, pets, and wildlife.

**Response: Illinois EPA will not be working on this topic during this triennial review period. The Illinois EPA will, however, commence research on HABs to evaluate their feasibility for rulemaking in the future. The Illinois EPA will evaluate what uses the cyanotoxin WQS will be protecting (aquatic life, recreation, human health, public water supply, etc.). The process of adopting a new WQS typically involves conducting research to ascertain a need for the WQS, determining the required resources, establishing implementation procedures, assessing the implications of adoption, and soliciting input from stakeholders.**

## **3. Ammonia Water Quality Standards**

Illinois EPA's supporting materials made available as part of the triennial review indicate that the Illinois EPA is currently working to update the State's ammonia criteria to protect aquatic life. As discussed in US EPA's 2013 Aquatic Life Ambient Water Quality Criteria for

Ammonia- Freshwater, ammonia is considered one of the most important pollutants in the aquatic environment because it is highly toxic and is commonly present in agricultural runoff and domestic sewage effluent. Illinois' current ammonia criteria were last updated in 2003. Since then, additional toxicity studies have been conducted for ammonia, including tests involving sensitive organisms, such as freshwater mussels. Therefore, US EPA strongly supports Illinois EPA's efforts to update the State's ammonia criteria to protect aquatic life.

Illinois EPA's supporting materials also indicate that the Illinois EPA is working to develop a multiple discharger variance for ammonia for small facilities. WQS variances can be an important tool states may use to improve water quality over time where it is currently infeasible to meet WQS. As required by 40 CFR 131.14(b)(1)(ii), WQS variances must include requirements that represent the highest attainable condition of the water body. As the Illinois EPA develops the multiple discharger variance, it should ensure that the multiple discharger variance will include all requirements and conditions necessary to ensure that ammonia discharges are reduced to the maximum extent feasible. US EPA is available to provide technical support, if requested.

**Response: Illinois EPA will continue to work on the multiple discharger variance (MDV) and applications of the 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater, as the MDV is an essential tool that aids small communities' compliance with the CWA. Once the MDV is established, the Illinois EPA will commence ammonia WQS adoption.**

#### **4. Update Subpart F: Procedures for Determining Water Quality Criteria**

- a. Updating 35 Ill. Adm. Code 302 Subpart F: Procedures for Determining Water Quality Criteria there are many important pollutants which Illinois EPA needs to derive toxicity standards for. Failing to upgrade this procedural machinery will have detrimental impacts on human health and the environment. Dated procedures can hinder the ability to derive numeric criteria for parameters that don't yet have water quality standard.
- b. 35 Ill. Adm. Code 302.210 Subpart F has not been updated in more than 30 years, hindering the Illinois EPA's ability to derive standards for emerging contaminants that present risks to agricultural soils, crops, livestock, and farm viability. These out-of-date procedures complicate the process of establishing numeric criteria for contaminants which do not have water quality standards, as Illinois EPA experienced with PFAS. As industry, business owners and communities around the state grapple with emerging contaminants such as PFAS it is imperative that Illinois EPA assessment methods are sufficiently updated to provide clear criteria. American Farmland Trust urges Illinois EPA to update Subpart F to develop procedures consistent with the latest science, federal policies, and guidelines to protect natural resources which support farmers, soil health and rural communities.
- c. adopted numeric criteria to protect human health for mercury and benzene and relies on the methodologies in 35 Ill. Adm. Code 302 Subpart F to derive numeric expressions of its narrative criteria for other pollutants. However, as noted in Illinois EPA's supporting materials made available during the triennial review, US EPA published updated guidance regarding human health criteria since Illinois' methodologies were last updated.

Additionally, according to Illinois' Derived Water Quality Criteria List (found at <https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/water-quality/standards/documents/masterdwqc-nov19.pdf>), many of Illinois' derived criteria were developed in 1999 or earlier and have not been updated since then. Additional data regarding health effects associated with exposure to those pollutants and exposure parameters (e.g., body weight, fish consumption rate) have been published since 1999 (e.g., see US EPA's 2015 human health criteria updates <https://www.USEPA.gov/wqc/human-health-water-quality-criteria-and-methods-toxics>).

Therefore, US EPA encourages Illinois to update its methodologies in 35 Ill. Adm. Code 302 Subpart F and evaluate whether any of its existing derived criteria should be updated based on new information.

**Response: Thank you for the comment on the importance of updating the methodology. The Illinois EPA will be working on updating Subpart F during this triennial review period.**

## **5. Adopt Per-and Polyfluoroalkyl Substances (PFAS) WQS**

- a. Illinois does not currently have a PFAS water quality standard. US EPA is proposing to issue surface water criteria to protect human health by the end of 2024. This will be helpful, but given the importance of this issue, we believe it is critical for ILLINOIS USEPA to act now to promulgate a standard based on current data.
- b. ILLINOIS EPA should use the Triennial Review process to adopt numeric WQS for perfluorooctanoic acid (“PFOA”), perfluorooctane sulfonic acid (“PFOS”), perfluorohexane sulfonic acid (“PFHxS”), hexafluoropropylene oxide dimer acid and its ammonium salt (“GenX”), perfluorononanoic acid (“PFNA”), and perfluorobutane sulfonic acid (“PFBS”). Illinois EPA should also evaluate the need for fish consumption standards for PFOS. It is critical to reduce discharges of PFAS using all available approaches, including water quality standards.
- c. American Farmland Trust recommends the adoption of numeric water quality standards for PFOA and PFAS consistent with draft federal water quality standards presented in Table 1. These standards will provide source control of PFAS-containing waste streams, protecting rural communities and farmers, and providing clear standards to inform important land use decisions.

**Response: This topic has not been chosen for the triennial review; however, the Illinois EPA is addressing PFAS issue on several different fronts:**

- **The Illinois EPA is proposing groundwater standards.**
- **Updating Subpart F methodology so that we can use current science. Once Subpart F is in place, we may use it to propose PFAS WQS.**
- **The Illinois EPA has initiated a new NPDES requirement to monitor and reduce PFAS discharges.**
  - **All major NPDES facilities, industrial NPDES minors with certain SIC codes, and other facilities that have the potential for discharging PFAS-containing wastewater will have a PFAS monitoring condition.**
  - **Furthermore, permittees shall develop a PFAS reduction plan, including**

**best management plans (BMPs) to reduce concentrations in the effluent and sludge.**

**US EPA has adopted criteria for PFOA and PFAS, however, these criteria protect aquatic life and are not protective of human health. The criteria that will protect human health are expected to be significantly more stringent than those that protect aquatic life. The Illinois EPA has decided not to adopt PFOA and PFOS that protect aquatic life to avoid confusion to the public. The Illinois EPA is aware that US EPA is proposing to issue surface water criteria to protect human health by the end of 2024. If the US EPA surface water criteria becomes available before Illinois EPA derives its surface water criteria, Illinois EPA may adopt the US EPA criteria.**

## **6. Evaluate Designated Recreational Uses (CAWS and Bubbly Creek)**

- a. These waterways have historically faced significant pollution challenges, disproportionately affecting nearby communities, often comprised of low-income and marginalized residents. Water quality directly impacts the safety and enjoyment of recreational activities in the CAWS and Bubbly Creek. To ensure that residents can safely engage in water-based activities such as rowing, fishing, and kayaking, it is essential to ensure the designated uses are appropriate.

Throughout this process the Illinois EPA must prioritize engagement with local residents, particularly those who have been disproportionately affected by environmental degradation.

Collaborative efforts involving community members, non-profit organizations, government agencies, and industry stakeholders are crucial in developing sustainable solutions that address pollution sources while meeting the needs and concerns of everyone.

- b. There are upstream rowing facilities and Marinas in the area, this is a popular fishing area. The watery has increasing levels of recreation on the waters so the WQS must be revised.
- c. The importance of updating the designated uses for human recreation in the Chicago Area Waterway System (CAWS) and the South Branch of the Chicago River (Bubbly Creek) cannot be overstated, particularly when considering that these waterways have historically faced significant pollution challenges, disproportionately affecting nearby communities, often comprised of low-income and marginalized residents. Water quality directly impacts the safety and enjoyment of recreational activities in the CAWS and Bubbly Creek. To ensure that residents can safely engage in water-based activities such as rowing, fishing, and kayaking, it is essential to ensure the designated uses are appropriate, in this case General Use.

Establishing appropriate designated uses in the CAWS and Bubbly Creek is crucial for recreation to continue to expand and thrive while also contributing to a more equitable distribution of environmental benefits for all residents.

- d. UChicago Crew specifically uses Bubbly Creek very frequently. Probably five out of every six practices will go into the Bubbly Creek instead of the canal, mainly because our team



is mostly comprised of a lot of inexperienced rowers joining a rowing team for the first time during their college years. We are constantly in contact with the water right from the beginning of practice to the end of practice. It is extremely noticeable how polluted the water is, and it is so concentrated particularly within Bubbly Creek. We have also had to cancel a lot of practices just because it has rained the day before or if there is just a lot of trash floating within the river. When it rains the day before, the water gets overflowed with sewage.

- e. Despite dramatic improvements in recent years in water quality, access for recreation, and restoration efforts, these vital waterways remain governed by outdated “Incidental Contact” recreational use designations imposed by the Illinois Pollution Control Board in 2011. As a result, these heavily utilized waters lack adequate protection for the fishing, swimming, and primary contact recreation envisioned by the Clean Water Act. This is a summary of Comments: Ultimately, the Board should remove each waterway from the list of “Incidental Contact Recreation Waters” in Section 303.225 of the Board’s regulations and add each waterway to the list of “Primary Contact Recreation Waters” in Section 303.220. Improve the water quality and water quality standards in Bubbly Creek and the upper reach of the Ship Canal due to the actual uses of the waterways by recreators. Moreover, US EPA should disapprove any portion of Illinois’ Triennial Review that does address the need to improve the water quality and water quality standards in Bubbly Creek and the upper reach of the Ship Canal, and, if necessary, should override the state’s standards in order to protect the waterways’ actual, existing uses using its CWA Section 303(c) authorities. It is thus clear from federal regulations that in order to comply with the CWA, states must set use designations that reflect uses existing on the waterway in question. The Board must upgrade the recreational use designation of both Bubbly Creek and the upper reach of the Chicago Sanitary and Ship Canal to “Primary Contact,” and the Illinois EPA should request that the Board do so. Rowing by ROW and similar organizations—an activity that satisfies the Board’s own definition of a Primary Contact activity—is now occurring frequently on both waterways. Accordingly, two different legal requirements mandate a Primary Contact designation. First, ROW and other organizations are rowing frequently on Bubbly Creek and the upper reach of the Ship Canal, an existing Primary Contact use that the designations must protect. Second, the Primary Contact use designation is not unattainable for either waterway.

Notwithstanding the UAA that underpinned the Board’s 2011 use designations, which, relied upon faulty assumptions, and is now outdated, Primary Contact recreation is readily attainable on both waterways, especially after the City of Chicago has invested millions of dollars in improving access for rowers and MWRD has invested in improving water quality. The triennial review being currently conducted by the Illinois EPA will show that relevant conditions on these waterways significantly improved since the previous UAA and these waterways should be designed for Primary Contact recreation. The Board must do so now.

**Response: Thank you for the comment on the importance of addressing the recreational use of Bubbly Creek and the Sanitary and Ship Canal. Due to public interest and its significance, the Illinois EPA will be working on this topic during this triennial review period. Input from stakeholders will be solicited during the triennial review period.**

## 7. Evaluate Designated Aquatic Life Uses (Bubbly Creek)

- a. As part of the State's rulemaking to update the WQS that apply to the Chicago Area Waterway System, Illinois considered updating the WQS that apply to the South Fork of the South Branch Chicago River (Bubbly Creek) but decided in 2015 to defer any actions until the U.S. Army Corps of Engineers (USACE) completes an ecosystem restoration study. Consequently, the applicable WQS for Bubbly Creek remain those established in the 1970s, which are less stringent for most parameters than the criteria that apply to other Chicago Area Waterway System waters and do not include chronic aquatic life criteria for many parameters.

According to the USACE website (<https://www.lrc.usace.army.mil/Missions/Civil-Works-Projects/Bubbly-Creek/>), funding for the Preconstruction Engineering and Design phase was obtained this year. Based on the project schedule provided in the USACE March 2020 Bubbly Creek, South Branch of the Chicago River, Illinois Integrated Ecosystem Restoration Feasibility Report and Environmental Assessment, project implementation will require more than eight years to complete once the Preconstruction Engineering and Design agreement is signed. Consequently, the ecosystem restoration projects would not be expected to be completed until 2031 at the earliest and could be completed later if any delays occur.

US EPA acknowledges that any analysis of the attainable condition of Bubbly Creek conducted now will entail projects are completed. However, updating the WQS for Bubbly Creek before the ecosystem restoration projects have been completed would allow Illinois to protect the improvements to aquatic life and increased uses of the waterway for recreation that have occurred since the last time the WQS for Bubbly Creek were revised. Such updates would also allow Illinois to update National Pollutant Discharge Elimination System permits and improve water quality in Bubbly Creek before the ecosystem restoration occurs, which may help improve the effectiveness of those projects. Consequently, US EPA encourages Illinois EPA to prioritize updating the WQS for Bubbly Creek rather than waiting for the ecosystem restoration projects to be completed.

- b. The Board should repeal the subsection of Section 302.401, subsection (a), which treats Bubbly Creek differently from other waterways in the Chicago Area Waterway System (CAWS), in order to eliminate an existing redundancy in the regulations that would become an inconsistency if the Board amended the use designations as requested herein.

**Response: This topic has not been chosen for the triennial review. During the proceeding before the Illinois Pollution Control Board (IPCB) in 2013 (R2008-009), the Board made the decision to defer until after USACE completed the habitat restoration project. Therefore, the Illinois EPA has decided to defer addressing the Aquatic Life Use until after the USACE has completed the ecosystem restoration of Bubbly Creek. At that time, the Tunnel and Reservoir Project (TARP) will most likely be complete, which will reduce the frequency and volume of discharge from the Racine Avenue Pump Station and Combined Sewer Overflows (CSOs). Aside from the Racine Avenue Pump Station and CSOs, the Illinois EPA is not aware of other dischargers on Bubbly Creek.**

## 8. Propose Updates to Chloride WQS (EPA 440/5-88-001)

- a. Average chloride concentrations are increasing in Illinois waters and, thus, it is important that Illinois be able to assess when average chloride concentrations may cause adverse effects to aquatic life and establish limits and conditions to control discharges of chloride that may contribute to the increasing chloride concentrations. US EPA recommends that Illinois identify numeric thresholds to implement its aquatic life narrative at 35 Ill. Admin. Code 302.210 for chronic exposure to chloride or develop a chronic criterion based on the latest available science.
- b. These elevated chloride levels are a major threat and factor limiting the biodiversity and functioning of Illinois rivers, streams, and lakes, including Lake Michigan. Increasing chloride concentrations have also been documented in Illinoisan groundwater, contaminating drinking water. growing body of research including Miltner (2021)<sup>5</sup> and MBI (2023)<sup>6</sup> suggest that the existing Illinois chloride WQS, and even the lower US EPA chronic chloride criteria, are not sufficiently protective of aquatic health. Thus, updates to the chloride WQS should be a priority of the Illinois EPA and the IPCB during the Triennial Review.

**Response: This topic has not been chosen for the triennial review. US EPA has indicated that the development of effective chloride WQS will not be wholly effective at this time and likely not approvable. Extant data shows that chloride ion criteria will not be representative of the toxicity of chloride. There is a better understanding of the mechanisms of toxicity, including the interconnectedness of ions that lead to toxicity. It is noteworthy that US EPA is developing "ions" criteria, which will replace the chloride criteria and will incorporate how ions act in concert to affect toxicity; US EPA considers this a better approach.**

#### **9. Propose Updates to Selenium WQS (EPA-R-21-006)**

In Illinois EPA's supporting materials made available as part of the triennial review, the Illinois EPA states that the adoption of US EPA's recommended criteria for pollutants such as selenium and arsenic "will entail the removal of species that are not relevant to the state, such as Salmonids, from the US EPA dataset." As documented in US EPA's April 2013 Revised Deletion Process for the Site-Specific Recalculation Procedure for Aquatic Life Criteria, states should recalculate criteria by deleting nonresident species "if and only if they are not appropriate surrogates of resident untested species." Specifically, US EPA's April 2013 guidance document recommends that states ensure that "[e]ach species, genus, family, order, class, and phylum that occurs at the site but not in the national toxicity dataset is represented in the site-specific dataset by at least one species most closely related to it from the national dataset." Although some species included in the national toxicity dataset for some criteria may not occur within the state, the Illinois Natural History Survey's Illinois Fish Species List reports that at least 188 native fish species from 27 families currently occur within the state, including at least four species in the same order as salmonids. If Illinois decides to proceed with the adoption of US EPA's recommended criteria, Illinois should consider whether fish species that do not occur within the state, such as salmonids, should be retained as a surrogate for other untested species that occur within the state.

**Response: This topic has not been chosen for the triennial review as other public priorities ranked higher. However, we note the comment. The Illinois EPA will take**

**these comments into account when updating selenium in consideration of developing a standard in the future.**

#### **10. Adopt Arsenic (Human Health Criteria)**

Illinois currently lacks any standard to protect fish consumption uses from arsenic. Such a fish consumption standard should be adopted. See 40 CFR 131.36.

**Response: This topic has not been chosen for the triennial review since there were other priorities from the public that ranked higher, however, we note the comment. When arsenic is updated in the future, the Illinois EPA will consider these comments in consideration of developing a standard.**

#### **11. Investigate Emerging Contaminates (6PPD-quinone (rubber crumbles), Plastics, Neonicotinoids)**

- a. Microplastics in freshwater and the aquatic food chain is a high priority issue in Illinois and a matter of great scientific and public concern but we strongly believe Illinois EPA should investigate and promulgate WQS for emerging pollutants, including drinking water contaminants on the US EPA CCL7 list, that pose the greatest threats to Illinois waters, the public and the environment. This should include PFAS, neonicotinoids, microplastics and cyanotoxins.
- b. The neonicotinoid insecticides thiamethoxam, clothianidin and imidacloprid are systemic, binding to water, and are widely used in seed coatings, as foliar sprays, and in lawn care applications. Their toxicity is well documented and the threats they pose to aquatic ecosystems is continually mounting (Morrissey et al. 20153, Cavallaro et al. 20174, Raby et al 2018a5, b6, U.S. EPA7). The aquatic life benchmarks and the human health standards should be revisited and lowered for Illinois due to their widespread use as well as the chronic presence of these pesticides in the water resources.

**Response: This topic has not been chosen for this triennial review cycle as other public priorities ranked higher; however, Illinois EPA notes the comment. Additionally, updates to Subpart F procedures may potentially address PFAS and other emerging contaminants.**

#### **12. Propose Updates/Adopt Lake Numeric Nutrient Criteria (EPA-822-B01-001)**

- a. We recommend expanding the numeric nutrient topic to include not only numeric nutrient criteria for lakes but also for flowing waterbodies. US EPA has encouraged states to adopt numeric nutrient criteria for all waters for decades. Recently, US EPA Assistant Administrator for Water Radhika Fox, encouraged states to couple innovative approaches with Bipartisan Infrastructure Law funding for clean water state revolving funds with “more robust adoption of numeric nutrient criteria into water quality standards.” On August 13, 2021, US EPA published final numeric water quality criteria recommendations for nitrogen and phosphorus under the Clean Water Act for lakes and reservoirs and implementation materials to help states adopt these recommendations. US EPA also published ambient water quality criteria recommendations for rivers and streams in this region and technical guidance in 2000. US EPA expects States to develop numeric nutrient criteria for lakes and reservoirs, rivers and streams, estuarine and coastal areas, and

wetlands because excessive levels of nutrients are a major reason why as much as half of the surface waters surveyed in this country do not meet water quality objectives, such as full support of aquatic life. Excess nutrients are triggering rising incidences of harmful algal blooms (HABs) in Illinois waters. It is established that excess nitrogen in drinking water poses significant threat to human health. Numeric criteria will help Illinois US EPA monitor nutrient inputs, improve the listing of impaired waters, NPDES permits and Total Maximum Daily Loads (TMDL) development, and help Illinois EPA reporting on the Illinois Nutrient Loss Reduction Strategy (Illinois NLRs). Wisconsin has developed numeric nutrient criteria for lakes and reservoirs and flowing waters (rivers and streams) and Region 5 may provide technical assistance. We urge Illinois EPA to adopt numeric nutrient criteria for lakes and reservoirs and flowing waters. Numeric criteria provide a clear basis for monitoring and reporting on water quality. A numeric standard would help Illinois assess the health of its waters and develop plans to restore them. Given the severity of nutrient pollution in Illinois, it is critical that Illinois EPA develop numeric standards to address the problem and protect human health and the environment. Expanding the topic to include flowing waters, for which US EPA published water quality criteria and technical guidance in 2000, will further aid partners in developing innovative nutrient reduction strategies.

- b. According to US EPA's Assistant Administrator. Radhika Fox in the April 5, 2022, memorandum, nutrient pollution remains a primary contributor to aquatic life and recreation impairments across the nation and the Midwest, including Illinois (April 5, 2022, memorandum). Nutrients and related impacts (e.g., algae) are among the top five causes of impairment of aquatic life and aesthetic quality across all waterbody types in the State. Monitoring data consistently show elevated concentrations of nitrogen and phosphorus in Illinois waters above thresholds known to be injurious to aquatic ecosystems and above numeric criteria adopted by states across the Midwest. To date, Illinois has not adopted numeric nutrient criteria for rivers and streams and has not evaluated the protectiveness of its 1972 lake phosphorus criteria for recreation despite a long history of monitoring and research related to nutrient enrichment, including State-sponsored efforts in 2018 to develop nutrient thresholds for establishing numeric criteria. US EPA encourages Illinois to make the development and adoption of numeric nutrient criteria a top priority for Illinois' water quality standards program under the CWA. In this regard, Illinois is also required under 40 CFR § 131.20(a) to evaluate US EPA's recently-published *Ambient Water Quality Criteria to Address Nutrient Pollution in Lakes and Reservoirs for adoption into its water quality standards*.

US EPA applauds Illinois in its efforts to strengthen and expand its Harmful Algal Bloom (HABs) program. Illinois has developed strong partnerships with other agencies, prioritized an expanded monitoring program with both fixed and event-based components, and created response and outreach tools such as a public data dashboard and a HABs response plan, making its program one of the more advanced in the region. Illinois' efforts with respect to HABs could be further enhanced by using this information to assess condition and impairment of recreational and drinking water uses across the State. At a minimum, Illinois is required to consider US EPA's *Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin* for adoption. Given that Illinois does not currently have criteria to protect recreational or drinking water uses from nutrients and algal blooms, US EPA's recommended criteria would be a good starting point for considering

how the State would like to protect water quality and public health from these threats. Adopting and implementing numeric criteria for nutrients and nutrient-related water quality parameters or strong narrative criteria to protect uses (e.g., aquatic life, recreation, and public water supply), combined with methods for generating numeric expressions of these narratives, enhances the effectiveness of permitting strategies, including water quality trading. US EPA strongly encourages Illinois to include consideration of the development of updated numeric nutrient assessment thresholds and numeric nutrient criteria in a comprehensive evaluation of its suite of nutrient management tools for implementing the CWA and protecting and restoring surface waters.

- c. We believe a top priority is establishing numeric nutrient criteria for lakes but also for rivers and streams. Promulgating numeric criteria for lakes, rivers and streams for phosphorus and nitrogen is needed to control the rising incidences of HABs in these waters and the Gulf of Mexico and to protect public health. Excess nitrogen poses a threat to drinking water from reservoirs, lakes, rivers, and associated groundwater supply. Recent studies show N and nitrates in drinking water can increase risk of colorectal and bladder cancer, thyroid disease, methemoglobinemia (“blue baby syndrome”) and neural tube defects at exposure levels below current Safe Drinking Water Act (SDWA) regulatory limits of 10 mg/L N. Numeric criteria will be far more helpful for addressing water quality concerns than narrative criteria, which are subjective, difficult to incorporate in regulatory and voluntary pollution control decisions and difficult to measure. Numeric criteria will allow development of protective NPDES permit limits for point sources of nutrients. These permits allow states to better track and monitor nutrient inputs from these sources through permittee reporting and state or US EPA inspections. Numeric nutrient criteria would facilitate the development of watershed-based projects, such as TMDLs, focused on nonpoint source nutrient reduction to address the full range of nutrient sources feeding into impaired waterbodies.

On August 13, 2021, US EPA published final numeric water quality criteria recommendations for nitrogen and phosphorus under the CWA for lakes and reservoirs and published implementation materials to help states adopt these recommendations. US EPA published ambient water quality criteria recommendations for rivers and streams in this region and technical guidance in 2000. The science to promulgate protective numeric nutrient standards is available. US EPA expects States to develop numeric nutrient criteria for lakes and reservoirs, rivers and streams, estuarine and coastal areas, and wetlands because excessive levels of nutrients are a major contributing factor preventing half of the surveyed surface waters in this country from meeting water quality objectives (such as full support of aquatic life). This is exemplified in Illinois in local aquatic life, contribution to hypoxia in the Gulf of Mexico, algal blooms and HABs and threats to local drinking water.

Illinois only has a partial Phosphorus criterion (0.05 mg/L) for large lakes and reservoirs (20 acres or larger), a nitrate standard (10 mg/L NO<sub>3</sub>) for lakes and drinking water reservoirs and no numeric nutrient criteria for rivers and streams. We strongly recommend expanding the proposed action from promulgating numeric nutrient criteria for lakes to rivers, lakes, and streams. We also recommend updating the numeric nutrient criteria for lakes to include any lakes above 5 acres in size. Many lakes in Illinois were created by impounding rivers and streams. The necessity of doing so is reflected in real-world occurrences, such as in 2015, when a HAB extended 650 miles along the Ohio River

through six states—Illinois, Indiana, Kentucky, Ohio, Pennsylvania, and West Virginia—and threatened the source of drinking water for over 5 million people.

- d. Despite the efforts of the Illinois NLRs, nutrient pollution—excess nitrogen and phosphorus—continues to increase in Illinois waters, including lakes, reservoirs, rivers, and streams. Nutrient pollution is a leading cause of water impairment in Illinois. While some reduction in phosphorus loading from wastewater treatment facilities has occurred, nitrogen, and phosphorus runoff from Illinois farmlands continues to plague state waters, causing HABs and contributing to the Gulf of Mexico dead zone. Nutrient pollution threatens the drinking water of millions, and the recent research shows potential health impacts from exposure to nitrate in drinking water at levels lower than the federal standard.
- e. The Illinois NLRs continues to be an important forum for partners from across the state to engage in water quality efforts. However, the 2023 Biennial Report will demonstrate continued need for strong Illinois EPA leadership and direction if we are to meet the strategy’s long-term goals of total phosphorus and total nitrogen reductions of 45% in our waterways. We recommend that Illinois EPA expand this topic to include flowing rivers and streams, utilize implementation materials provided by USUSEPA and adopt the final numeric water quality criteria published in 2021. These efforts will inform best practices for utilizing unprecedented Bipartisan Infrastructure Law funding for clean water state revolving funds in support of nonpoint source solutions. Through clear communication and collaboration, Illinois can accelerate progress on nutrient reduction, support the agricultural sector and drive environmental outcomes. American Farmland Trust urges Illinois USEPA seek technical assistance from Region 5, utilize available federal resources and adopt expanded numeric criteria to provide continued strong leadership of the Illinois NRS.
- f. Illinois EPA grades the state’s WQS of 0.05 mg/L on the epilimnion and hypolimnion for lakes greater than 20 acres. Based on conversations with the Lake County Health Department and our personal experience, there are few lakes, if any, that meet this criterion. A problem exists for the 1.) numeric value for phosphorus and 2.) how it is applied and interpreted. The standard loses its diagnostic and regulatory value (i.e., everybody is in violation of the standard). Other states have sliding criteria based on lake morphology, lake use, and ecoregion profiling. Wisconsin’s standards range from 15ug/L to 40 ug/L, Minnesota uses site specific standards based on ecoregion and beneficial use. US EPA ecoregion information is based on a statistical database for a randomized set of lakes and for which “reference” aquatic communities are identified. Reference sites represent aquatic communities in “least impacted” sub watersheds. The northern part of our state lies within Level III Ecoregion: Central Corn Belt Plains. There are six different level III ecoregions in Illinois. The US EPA sliders, as presented in the Illinois EPA website, use phosphorus concentration in a regression relationship with *chlorophyll a* to “grade” the trophic condition of an inland lake. Similarly, total nitrogen is related by regression to dissolved organic carbon. An immediate problem with using these data is that they are based on backward looking water quality sampling and average rainfall. An immediate value of the method is that it gives recognition to regional physiographic differences.

The origin of the “target values” is not successfully explained on the website. The underlying methods of ecoregion profiling are not fully explained, thus the “normative”

values that are associated with the region are not evident. Based on years of experience, I believe that the .05 mg/L standard is not protective of our regional lakes. Other states and the US EPA data base bring a desired lake criteria into the 0.04 mg/L range. Implications of this affect the TMDL process, the NARP load assessments, and implementation of nutrient control projects.

**Response:** This topic has not been chosen for this triennial review cycle as other public priorities ranked higher. However, Illinois EPA notes the comments. The Illinois EPA is working on several fronts to address nutrients throughout the state. The Illinois EPA has a Nutrient loss Reduction Strategy (NRLS) to address point and non point sources of nutrients. As major facilities account for the majority of the total phosphorus load, the Illinois EPA's nutrient reduction effort focus primarily on major sewage treatment facilities. The following nutrient point-source controls have been, and continue to be, implemented by the Illinois EPA for major municipal facilities.

- Technology-based total phosphorus effluent limit of 1.0 mg/L (2006) for all new and expanded facilities.
- Interim total phosphorus effluent limit of 1.0 mg/L if the receiving stream has an impairment indicative of excessive nutrients.
- Antidegradation for all new and expanded major municipal facilities to meet a total phosphorus effluent limit of 1.0 mg/L. Additionally, the Illinois EPA is requiring all new and expanded facilities to address total nitrogen, unless it can be demonstrated that such a lowering is necessary to accommodate important economic or social development.
- Total phosphorus feasibility/optimization plans (2015) are required to be submitted and implemented.
- Nutrient Assessment Reduction Plans (2019) were required to be developed for discharges to a receiving waterbody that has been determined to be impaired or at risk of eutrophication.
- Agreement for a total phosphorus effluent limit of 0.5 mg/L (2019) becomes effective as follows:
  - 2025 if the facility chooses to install chemical phosphorus removal.
  - 2030 if the facility chooses to install biological phosphorus removal.
  - 2035 if the facility chooses to install biological nutrient removal (both nitrogen and phosphorus).

### 13. Other:

- a. I would like to develop the topics identified above more fully but there is not sufficient time to do so. The 14 items identified in the public announcement have substantial potential implications for our region. They deserve a reasonable public discussion. Illinois EPA needs to devote sufficient resources to the water quality standards review so that "all" of these water quality issues are addressed. I respectfully ask that the review period be extended by at least a month.

**Response:** The comment period and survey availability were extended by an additional 30 days.



- b. As part of US EPA's 2015 revisions of the federal WQS regulations, US EPA revised the federal requirements pertaining to triennial reviews at 40 CFR § 131.20(a) to require that if states and authorized tribes choose not to adopt new or revised criteria for parameters for which US EPA has published new or revised 304(a) criteria recommendations, they must explain their decision when reporting the results of their triennial review to US EPA. As stated in the preamble to the 2015 revisions, US EPA expects that as a result of this requirement:

[f]ollowing this rulemaking, when states and authorized tribes conduct their next triennial review, they must provide an explanation for why they did not adopt new or revised criteria for parameters for which US EPA has published new or updated CWA section 304(a) criteria recommendations since May 30, 2000. During the triennial reviews that follow, states and authorized tribes must do the same for criteria related to parameters for which US EPA has published CWA section 304(a) criteria recommendations since the states' or authorized tribes' most recent triennial review. (80 Fed. Reg. 51028)

A list of all new or updated 304(a) criteria recommendations since May 30, 2000 can be found at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100MYS8.PDF?Dockey=P100MYS8.PDF>. Since that list was prepared in July 2015, US EPA has published new or updated 304(a) aquatic life criteria for aluminum, cadmium and selenium and is in the process of publishing updated 304(a) aquatic life criteria for perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Additionally, US EPA has published new or updated 304(a) human health recreational criteria for cylindrospermopsin and microcystins. Illinois USEPA's public notice requests comment on the prioritization of several project topics, some of which include adopting US EPA recommended criteria for specific pollutants (e.g., selenium, copper, and aluminum). To be consistent with the revised 40 CFR § 131.20, for all parameters for which US EPA has published new or updated 304(a) criteria recommendations since May 30, 2000, Illinois EPA's triennial review submission to US EPA should include a discussion of whether the State has adopted the 304(a) criteria recommendations and an explanation for those parameters where the State has not adopted the 304(a) criteria recommendation. Additionally, as described in the preamble to US EPA's 2015 WQS regulatory revisions at 80 Fed. Reg. 51029, US EPA strongly encourages that Illinois USEPA makes these explanations publicly available as part of the materials available for public review and comment.

**Response: Section 304(a) criteria are developed by US EPA under authority of section 304(a) of the Act based on the latest scientific information on the relationship that the effect of a constituent concentration has on particular aquatic species and/or human health. This information is issued periodically by the States as guidance for use in developing criteria. When it comes time for Illinois EPA to work on a specific criterion, Illinois EPA will review the latest criteria developed by US EPA when moving forward with a proposed rulemaking. Also, as required under 304, Illinois EPA must submit water quality standards adopted in Illinois to US EPA for approval. When the adopted water quality standards are sent to US EPA for approval, the Illinois EPA will provide an explanation for why the Illinois EPA did not adopt new or revised criteria for parameters for which US EPA has published new or updated CWA section 304(a) criteria recommendations since May 30, 2000.**

- c. We urge Illinois EPA to consider environmental justice needs and the disproportionate

impact of water pollution on frontline communities in urban and rural areas throughout Illinois. We appreciate that Illinois EPA has put forth additional effort in public outreach for this triennial review. We also believe there is always room for growth in socialization to trigger greater public engagement and understanding, particularly in the most heavily affected communities. We recommend providing straightforward materials that summarize the role of WQS in the overall context of ambient water-quality based/water body protections in the Clean Water Act. To do so, it is critical to explain in digestible terms the WQS objectives, purpose, and their relevance to big-picture, everyday use, and impacts.

While the Triennial review is limited to WQS procedures and development, we note that WQS are an integral part of the Clean Water Act's ambient based water quality protections, connecting with large-scale aquatic and human health concerns. Extensive community engagement and innovative approaches to new challenges, centered around the latest data, are necessary to ensure WQS are successfully implemented and drive improvements to restore waterbody health in alignment with the original intent of this process.

**Response: Illinois EPA is committed to continuing its consideration of environmental justice community needs during the triennial review process. To enhance understanding of the triennial review purpose and process, Illinois EPA will update the triennial review webpage summarizing the role of water quality standards in the overall context of ambient water-quality based/water body protections in the Clean Water Act.**

- d. As the largest wastewater treatment plant in the world, the impact of undischarged wastewater discharge from the Stickney facility is unmistakable. The loading of fecal coliform and e-coli into the Chicago Sanitary and Ship Canal is evidenced by MWRDGC's own NPDES permit application in Table AII 26 and Table AII27. In these Tables, MWRDGC presented results from sampling stations, including station 75 at Cicero Avenue and station 41 at Harlem Avenue. Cicero Avenue is immediately upstream of the main Stickney outfall; Harlem Avenue is immediately downstream. Notably, the 2011 levels of e-coli at subsequent sampling stations that are further downstream are also exponentially elevated by comparison to the Cicero sampling station, including sampling station 42 at Route 83 (3446 cfu/100mL). These burdens include the discharge of undischarged wastewater into nearby waterways, creating present day dangers and artificially constraining the attainment of higher and better recreational uses that would directly benefit these local communities the lack of disinfection at the Stickney facility also impacts the health of the communities nearby. In early July of 2023, the Cicero area was impacted by numerous major flooding event.

**Response: The Illinois Pollution Control Board has designated the stream segment that Stickney discharges to as "Incidental Contact Recreation Waters". Incidental Contact Recreation Waters must protect for incidental contact recreation and dischargers to these segments are not required to disinfect as per the Board's regulations. The Stickney facility is one of such dischargers. Due to public interest and its significance, the Illinois EPA will be working on assessing the recreational designated use of the CSSC downstream of the Stickney Waste Water Treatment Facility during this triennial review period.**

- e. In light of these disproportionate burdens placed upon the health and enjoyment of the

nearby communities, Cicero Community Farm and Ms. Barajas are also requesting Illinois EPA to conduct an environmental justice analysis as part of its triennial review. The request for an environmental justice analysis is based on the significant, adverse, and disproportionate effects of the Stickney facility on local communities and on the water quality in the CSSC that flows through these communities.

Illinois EPA as a federally funded entity, has a legal obligation to consider environmental justice issues in compliance with Title VI. 25 As articulated in Title VI, recipients of federal funds have an affirmative obligation to ensure non-discrimination. Because Illinois EPA is a state agency receives funding from a federal entity, the U.S. Environmental Protection Illinois EPA, it has a legal duty to ensure non-discrimination in this case.<sup>26</sup> Illinois EPA will violate its legal responsibilities under Title VI if it conducts its triennial review without a full environmental justice analysis. Because the areas surrounding the MWRDGC facility and the CSSC are disproportionately minority, it is exactly the type of area that is meant for protection under Title VI and Illinois environmental justice policies.

**Response: The Illinois EPA recognizes that Cicero and the surrounding communities are areas of EJ concern. In addition, as part of the triennial review process, the Illinois EPA conducted additional outreach given the potential for the identified list of potential water quality topics to impact environmental justice communities. The topics selected to work on by the Illinois EPA over the next three years considered oral and written comments, as well as survey results. Specifically, Illinois EPA Bureau of Water chose to evaluate the Chicago Sanitary and Ship Canal for recreational uses, including the area around the MWRD Stickney wastewater treatment plant, which discharges into the canal. As part of that evaluation, Illinois EPA is committed to analyzing and incorporating environmental justice considerations.**

- f. During the public hearings on July 6th, 2023, Illinois EPA stated its intention to limit itself to three topics for this Triennial Review process. The Illinois EPA should not artificially constrain itself to such a limited review. Illinois EPA has a duty to protect Illinois waterways and residents. It must adopt protective water quality criteria based on current and sound scientific rationale. 40 CFR 131.11(a). If Illinois EPA only selects three topics to review, it will fall far short of that requirement. In light of the serious and pressing water quality issues throughout the state, the Environmental Organizations strongly urge Illinois EPA conduct a comprehensive and rigorous review of Illinois standards, rather than limiting itself to three topics.

We appreciate the provided list of WQS topics under Illinois EPA consideration as well as the opportunity to highlight additional WQS issues the Illinois EPA has not flagged. Preparing a list of topics for the triennial review is conducive to meaningful public comment and engagement. It provides the public with sufficient understanding of current key WQS topics from the Illinois EPA's perspective which, in turn, offers helpful direction to the public for comments and filling out the survey. However, while we understand that Illinois EPA has capacity considerations, we are concerned by the self-imposed limitation to three high- priority WQS topics.

Water quality issues impact countless aspects of our daily lives. This is particularly relevant in environmental justice communities in urban and rural Illinois. Residents are grappling with a variety of water quality issues, spanning from exposure to emerging contaminants

such as PFAS to nutrients that trigger hazardous algal blooms. As an overarching priority, we urge the Illinois EPA to enact a deadline for completing Phase 1 of the triennial review by providing the Illinois EPA's recommended set of WQS actions, to be taken to the Illinois Pollution Control Board (IPCB) by the end of this calendar year.

Similarly, Phase 2 should be expedited. Illinois EPA's timeline shows it may take 3-4 years to develop WQS and present them to IPCB and US EPA for approval. Given the importance of WQS in protecting the health of waters, wildlife, and the people of Illinois, we respectfully urge you to accelerate this process.

**Response: Illinois EPA established this process to determine which topics were most important to the public. The Illinois EPA has chosen the three topics that it believes can be achieved in a timely manner. To change a WQS, the Illinois EPA must make a proposal to the IPCB. Once the IPCB makes a change to the regulation, the Illinois EPA must get the changed regulations approved by US EPA. This is an involved process that takes a lot of resources. Before making the proposal to the IPCB, the Illinois EPA must research the issue, hold meetings with stakeholders conduct recreational surveys coordinate with US EPA, and develop a technical document with the proposed change in the regulations, state the reason Illinois EPA is proposing the change, and develop supporting technical documentation called a "Statement of Reasons". Once the Rulemaking proposal goes to the IPCB, the Illinois EPA must participate in hearings, respond to questions from the IPCB, public, and stakeholders. After the IPCB adopted the new standards, the adopted standards must then be sent to US EPA for approval.**

- g. The widespread use of pesticides in agriculture, residential, and commercial settings pose significant risks to aquatic ecosystems and human health. In recent years there has been a significant increase in the use of several common herbicides. This increase in use is largely due to the widespread adoption of planting herbicide tolerant crops and the ongoing battle to conquer herbicide resistant agricultural weeds (USDA18). As a result of these changes, the use of 2,4-D, dicamba, glyphosate, glufosinate and atrazine have increased alarmingly in recent years (USGS19). The Illinois EPA should prioritize the development of WQS for these pollutants.

**Response: This topic has not been chosen for the triennial review, but Illinois EPA note the comments. The Illinois EPA has developed derived criteria for the following parameters:**

- 2,4-D (acute criteria: 100 ug/L; chronic criteria: 8 ug/L),
- Dicamba (acute criteria: 1500 ug/L; chronic criteria: 150 ug/L),
- glyphosate (acute criteria: 1.5 mg/L; chronic criteria: 0.12 mg/L), and
- atrazine (acute criteria: 82 ug/L; chronic criteria: 9 ug/L)

The derived criteria are used for waterbody assessments and for determining permit limits, if necessary. The derived criteria information can also be found at:

<https://epa.illinois.gov/topics/water-quality/standards/derived-criteria.html>

After adopting and updating the new Subpart F methodology, the Illinois EPA may be able to use Subpart F to derive more up-to-date criteria for these parameters.

- h. We support the comments provided by the Environmental Groups at large, identifying the

myriad of issues facing our waters and the improvements to Water Quality Standards that would address those issues. We encourage you to move forward on all of the issues.

**Response: Thank you for your comment.**

- i. Our top three priorities are:
- Investigating and developing WQS for emerging contaminants, including neonicotinoids, PFAS, microcystin and microplastics.
  - Developing numeric nutrient WQS for Illinois rivers, lakes, and streams.
  - Updating the Subpart F procedures

We note that environmental justice is a cross-cutting issue that should be woven throughout each facet of ILLINOIS USEPA's Triennial WQS review process.

**Response: Thank you for your comment.**

- j. An oral commenter discussed concerns of homes flooding when there are large rain events. The oral commenter further stated that homes and streets flood with the water that is not disinfected, in the Cicero community.

The Hearing Officer explained that the agency cannot address the flooding topic as it is outside of the scope of the triennial review. However, chlorination of the treated effluent is a water quality standard and it is noted as one of the topics that they would like to see addressed.

Beyond recreational opportunities, the lack of disinfection at the Stickney facility also impacts the health of the communities nearby. In early July of 2023, the Cicero area was impacted by numerous major flooding events. As rainfall totaled nearly nine inches in a single day, the non-disinfected water flooded into homes. According to the CDC, exposure to such contaminated floodwater can cause wound infections, skin rash, gastrointestinal illness, tetanus, and/or leptospirosis. These concerns are even greater for members of disadvantaged communities, especially the elderly, young, and those with compromised immune systems. Outside of this specific event, community members have also shared anecdotal experiences of illness after prolonged exposure to the water. Whether through intentional recreational contact or accidental exposure, the non-disinfected wastewater poses a public health concern that can and must be remedied through heightened WQS.

Would like to know who would be able to address the flooding concerns if it is not under the Illinois EPA's jurisdiction?

**Response: This issue cannot be addressed in the triennial review. According to the National Weather Service, more than 8 inches of rain fell in Cicero and Berwyn. This rate of rainfall overwhelmed the communities' storm sewer systems and resulted in the flooding. Flood waters then began entering either the sanitary sewer system to be treated at the Stickney WWTP or the TARP storage system, the contents of which ultimately are treated at the Stickney WWTP. However, an unknown and significant portion of these flood waters never made it to the Stickney WWTP to be treated. Even if Stickney would have been disinfecting their effluent at the time, the flood waters would**

**not have been disinfected, since the water did not reach the Stickney WWTP for treatment.**

**This issue is handled by local governments for their storm sewer systems and MWRDGC for their combined sewer system and TARP system.**

- k. If the priorities regarding the CWA are not selected as part of the top 3, what happens if a violation of the CWA that was not addressed by the priorities.

**Response: This Clean Water Act states that you must evaluate the 304(a) criteria. A violation of that criteria does not occur until the water quality standard is adopted by the IPCB and approved by US EPA.**

- l. Will the survey be available in other languages?

**Response: The survey instructions and survey were made available in Spanish on the Illinois US EPA's Triennial Review webpage located at:**  
**<https://epa.illinois.gov/topics/water-quality/standards/triennial-review.html>**

## ACRONYMS AND INITIALS

CAWS	CHICAGO AREA WATERWAY SYSTEM
CDC	CENTERS FOR DISEASE CONTROL AND PREVENTION
CSSC	CHICAGO SANITARY AND SHIP CANAL
CSO	COMBINED SEWER OVERFLOW
CWA	CLEAN WATER ACT
CWS	COMMUNITY WATER SYSTEM
EC	EMERGING CONTAMINANTS
EJ	ENVIRONMENTAL JUSTICE
HAB	HARMFUL ALGAE BLOOMS
IPCB	ILLINOIS POLLUTION CONTROL BOARD
ILLINOIS EPA	ILLINOIS ENVIRONMENTAL PROTECTION
MCL	MAXIMUM CONTAMINANT LEVEL
MWRDGC	METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
NRLS	NUTRIENT REDUCTION LOSS STRATEGY
PFAS	PER-AND POLYFLUOROALKYL SUBSTANCES
PFOA	PERFLUOROCTANOIC ACID
PFOS	PERFLUOROCTANE SULFONIC ACID
ROW	RECOVERY ON WATER
TMDL	TOTAL MAXIMUM DAILY LOADS
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
US EPA	UNITED STATES ENVIRONMENTAL PROTECTION ILLINOIS EPA

**DISTRIBUTION OF ILLINOIS EPA SUMMARY AND AGENCY STATEMENT**

The Summary and Illinois EPA Statement is available on the Illinois USEPA website at <https://www2.illinois.gov/epa/public-notices/Pages/section-401-notices.aspx>. Printed copies of the Summary and Illinois EPA statement are available from Barb Lieberoff, Office of Community Relations, [barb.lieberoff@illinois.gov](mailto:barb.lieberoff@illinois.gov), (217) -524-3038.

**FOR ADDITIONAL INFORMATION/ILLINOIS EPA CONTACTS**

Jeff Guy, Hearing Officer: [Jeff.Guy@illinois.gov](mailto:Jeff.Guy@illinois.gov), (217) 785-8724

Brad Frost, Office of Community Relations: [Brad.Frost@Illinois.gov](mailto:Brad.Frost@Illinois.gov), (217) 782-7027

Barb Lieberoff, Office of Community Relations: [Barb.Lieberoff@Illinois.gov](mailto:Barb.Lieberoff@Illinois.gov), (217) 524-3038

Scott Twait, Bureau of Water: [Scott.Twait@Illinois.gov](mailto:Scott.Twait@Illinois.gov), (217) 785-3945

Yetunde Agbesola, Bureau of Water: [Yetunde.Agbesola@Illinois.gov](mailto:Yetunde.Agbesola@Illinois.gov), (217) 782-9852

Stefanie Diers, Division of Legal Counsel, [Stefanie.Diers@illinois.gov](mailto:Stefanie.Diers@illinois.gov), (217) 782-5544