



November 21, 2023

Via electronic mail *RegComments@pa.gov*

Environmental Quality Board  
P.O. Box 8477  
Harrisburg, PA 17105-8477

**Re: Comments on Proposed Rulemaking  
Triennial Review of Water Quality Standards  
53 Pa. B. 6170 (Oct. 7, 2023)**

Dear Environmental Quality Board:

Citizens for Pennsylvania's Future (PennFuture) submits these comments to the Pennsylvania Environmental Quality Board (EQB or the Board) in response to the proposed rulemaking advancing certain amendments to Chapter 93 of Section 25 of the Pennsylvania Code, published in the Pennsylvania Bulletin on October 7, 2023. 53 Pa. B. 6170. This proposed rulemaking, known as the Triennial Review, is required by section 303 of the Clean Water Act and authorized by Sections 5(b)(1) and 402 of the Clean Streams Law. *See* 33 U.S.C. § 1313; 35 P.S. §§ 691.5(b)(1), 691.402.

PennFuture is a member-supported environmental advocacy organization. PennFuture is leading the fight for a stable climate, clean air, and pure water through legal advocacy, policy engagement, and empowering all Pennsylvanians to build sustainable communities and a clean energy economy for future generations. One focus of PennFuture's work is to improve and protect water resources and water quality across Pennsylvania through public outreach and education, advocacy, and litigation.

The objectives of the Clean Water Act (or CWA) include restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. 33 U.S.C. § 1251(a). One mechanism the statute uses to accomplish this goal is periodic reassessment and refining of water quality standards through the Triennial Review process. 40 C.F.R. § 131.20. This helps to ensure Pennsylvania's Clean Water Act programs function to protect and to restore water quality in the state.

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## **I. The Board Must Expediently Adopt Aquatic Life Criteria for Chloride or Specific Conductivity.**

As we did in our 2018 comments, we once again call on the board to protect aquatic life in Pennsylvania's waters from discharges of chloride. EPA originally established national aquatic life criteria for chloride in 1988.<sup>1</sup> It took until 2010—over 20 years—for EQB to propose a rulemaking to adopt these criteria, but even then, no final standard was adopted. In 2012, EQB proposed a different set of equation-based criteria for chloride that would account for the effect of the hardness and sulfate concentration on chloride toxicity, but later withdrew that proposal to allow DEP to conduct further studies. Despite the completion of additional toxicity studies and refinement of the Pennsylvania-specific equations during the development of the 2016 Triennial Review regulatory package, “the Department is not recommending a specific chloride criterion with this proposed rulemaking.” 47 Pa. B. at 6612. Acceding to that recommendation, the Board deferred proposing aquatic life criteria for chloride.

One reason given at the time for the further delay was EPA's publication in December 2016 of a new draft field-based method for developing aquatic life criteria for specific conductivity.<sup>2</sup> But DEP has now had over five years to review that draft methodology document and should have by this point developed the necessary aquatic life criteria for Pennsylvania.

We know, and DEP knows, that “elevated levels of chloride are toxic to aquatic life in freshwater environments,”<sup>3</sup> and that chloride can negatively affect the fish and insect community structure, diversity, and productivity, even at lower levels.<sup>4</sup> And we know that Pennsylvania streams are impacted by “freshwater salinization syndrome,” which is a long-term increase in concentrations of major ions and metals in fresh water attributed to the application of road salt. One 20-year study of six streams in southeastern PA showed the detrimental impact this can have not only on the chemical health of our streams, but also on the water infrastructure and municipal water supplies.<sup>5</sup> Community science monitoring of chloride throughout Pennsylvania shows just a small snapshot of the prevalence of high levels of chloride in our surface waters, with results showing over a quarter of the waters tested have harmful and toxic levels of

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<sup>1</sup> EPA, Ambient Water Quality Criteria for Chloride – 1988 (Feb. 1988).

<sup>2</sup> EPA, Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity, EPA-HQ-OW-2016-0353, 81 Fed. Reg. 94370 (Dec. 2016).

<sup>3</sup> 47 Pa. Bull. at 6611.

<sup>4</sup> Steven R. Corsi, et. al, *A Fresh Look at Road Salt: Aquatic Toxicity and Water Quality Impacts on Local, Regional, and National Scales*, 44 Environ. & Sci. Technol. 7376, 7381 (2010).

<sup>5</sup> Rossi, et al., *Land development and road salt usage drive long-term changes in major-ion chemistry of streamwater in six exurban and suburban watersheds, southeastern Pennsylvania, 1999-2019*, 11 Front. Environ. Sci. (May 26, 2023) 26 May 2023, avail. at <https://doi.org/10.3389/fenvs.2023.1153133>.

chloride.<sup>6</sup> Conductivity is also a reported problem in some of the critical special protection headwaters of the state, where watershed organizations have found high levels of chloride that result in year-round impacts.<sup>7</sup> Inevitably, studies will be necessary to determine relationships and impacts more precisely. But while those studies are being undertaken, chlorides from gas production wastewater, mine drainage, industrial facilities, road salts, and water softeners continue to remain unchecked with devastating impacts on the aquatic biological communities in Pennsylvania's waters.

Pennsylvania's adoption of aquatic life water quality criteria for chloride is long overdue. We appreciate the efforts of the Department and the Board to develop and refine such criteria, but we can no longer wait for these necessary protections. We are disappointed to learn that another triennial review has come without the necessary aquatic life criteria for chloride or specific conductivity. The DEP and EQB must not let yet another triennial review pass without Pennsylvania having criteria in place to protect the aquatic life of Pennsylvania waters from the toxic effects of chloride.

## **II. DEP Must Recognize and Protect the “Water Contact Sports” Existing Use for the PA Portions of Zone 3 and River Miles 95.0 to 81.8 of Zone 4 of the Delaware Estuary.**

PennFuture is one of the petitioners to the Delaware River Basin Commission (DRBC) to upgrade Zone 3 and the upper portion of Zone 4 of the Delaware River mainstem to “primary contact” recreation.<sup>8</sup> Similarly and for the reasons set forth below, we urge the Board to adopt “water contact sports” (WC) as a designated use for these sections of the Delaware River. At the very least, DEP must recognize and protect WC as an existing use of these sections.

In 1988, the DRBC's Use Attainability Swimmability Report recommended that Zone 3 and Upper Zone 4 should retain secondary contact use with fecal coliform and *enterococcus* criteria of 770/100 mL and 88/100 mL, respectively.<sup>9</sup> Despite repeatedly recognizing that “. . . all types of primary-contact recreation currently occur in this reach during the recreation

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<sup>6</sup> Izzak Walton League of America, *Salt Watch, Season 6 Final Report*, avail. at [https://www.iwla.org/docs/default-source/conservation-docs/water-docs/salt-watch-report-season-6.pdf?sfvrsn=4659900d\\_3](https://www.iwla.org/docs/default-source/conservation-docs/water-docs/salt-watch-report-season-6.pdf?sfvrsn=4659900d_3), at 15-16.

<sup>7</sup> See, e.g., Brodhead Watershed Association, *Project Headwaters: Determining the Cause of High Conductivity, Yankee Run & Forest Hills Run, Mount Pocono, PA* (Aug. 2022), avail. at <https://brodheadwatershed.org/wp-content/uploads/Project-Headwaters-Presentation-Aug-2022.pdf>.

<sup>8</sup> The current DRBC designation is “secondary contact.”

<sup>9</sup> Yagecic, J., “Recreational Uses & Criteria: Status and Developments,” DRBC Water Quality Advisory Committee, July 18, 2018, avail. at [https://www.nj.gov/drbc/library/documents/WQAC/071818/yagecic\\_recreational-criteria\\_DelEstuary.pdf](https://www.nj.gov/drbc/library/documents/WQAC/071818/yagecic_recreational-criteria_DelEstuary.pdf).

season,”<sup>10</sup> the report stated that primary contact use would be a future goal for these zones based on an evaluation and a firm commitment to a Combined Sewer Overflow (CSO) correction program.<sup>11</sup> DRBC included the recommendations of the Use Attainability Swimmability Report in its regulations for water use classifications and water quality criteria in 1991, and DRBC’s designated uses were included in Pennsylvania’s regulations by reference in §§ 93.9e and 93.9g in 1994.

Thirty years later, the waterscape is different. With Philadelphia, Camden, and Wilmington all actively addressing their CSO problems, we know that WC recreation that involves the risk of water ingestion continues to take place and is increasing in all reaches of the Delaware River, including throughout Zone 3 and the upper reaches of Zone 4. The time has now come for the Commonwealth of Pennsylvania to formally and legally recognize and protect water contact sports recreation in all of Zone 3 and Upper Zone 4.

For example, since 2011, the Philadelphia Water Department’s Green City, Clean Waters program has reduced stormwater in combined sewers while technology has simultaneously improved. This results in more accurate models of CSO systems, including timing and volume of discharge. These statistical models provide guidance on current conditions relevant to contact recreation. In 2018, the DRBC presented evidence that Zone 3 and Upper Zone 4 would meet fecal coliform and enterococcus criteria for primary contact use by using tools that predict which sets of conditions are likely to contribute to exceedances.<sup>12</sup> This demonstrates that water dischargers to the River are not only legally bound to achieve PA’s WC regulatory protections, but they are able to achieve those standards using technologies available today.

Moreover, water contact sports (“uses of the water for swimming and related activities”) in these zones is not only attainable, but is already taking place today. As our 2020 petition to DRBC<sup>13</sup> evidences, water skiing, wakeboarding, jet skiing, canoeing, kayaking, paddle-boarding, snorkeling, and swimming are “water contact” recreation activities that are currently taking place in Zone 3 and Upper Zone 4 of the River. In addition, numerous organizations, including educational and cultural institutions and environmental groups, regularly host water contact sports recreation programming in Zone 3 and Upper Zone 4 of the Delaware River.

PennFuture recognizes that “[h]azards inherent in an urban-industrial shoreline and river” have been raised as reasons to exclude WC from these portions of the Delaware, including by

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<sup>10</sup> Delaware River Basin Commission, *Report on the Attainability of Swimmable Water Quality*, December 1988, Delaware Estuary Use Attainability Project, DEL USA Project Element 19, 8.

<sup>11</sup> Yagecic, J. “Recreational Uses & Criteria: Status and Developments”.

<sup>12</sup> *Id.*

<sup>13</sup> Incorporated by reference into these comments and attached hereto as Attachment A.



DEP in the last Triennial Review. But this is neither an appropriate nor a legally-defensible rationale for denying recreational use designations, as our DRBC petition details. The Department and the Board must act now to protect the existing use of “water contact sports” in this section of the Delaware River. If DEP refuses to do so through revising its designated use regulations, then at the very least, it must do so through its recognition of WC as an existing use in Zone 3 and Upper Zone 4 of the Delaware River. Doing so not only complies with the letter and spirit of the Clean Water Act, but is a necessary action for DEP as a trustee of our public natural resources under Article I, Section 27 of the Pennsylvania Constitution.

We thank you for the opportunity to provide these comments on the Triennial Review.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Abigail M. Jones".

Abigail M. Jones, Esq.

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