



December 16, 2013

Mr. Robert Hust
CT Dept. of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
Planning and Standards Division
79 Elm Street
Hartford, CT 06106-5127

Comments on Triennial Review of Water Quality Standards

Dear Mr. Hust,

Thank you for the invitation to comments during the triennial review of Connecticut's Water Quality Standards. I am submitting these comments on behalf of the Farmington River Watershed Association, a 501(c)(3) non-profit citizens' group whose mission is to preserve, protect, and restore the Farmington River and its watershed through research, education, and advocacy. Our organization was founded in 1953 and comprises approximately 1,000 member households, mostly in the Farmington Valley. We monitor physical, chemical, and biological indicators of water quality at multiple locations in the Farmington watershed, and provide this information to CT DEEP annually. In addition, we advocate for sound water policies at the local, state, and federal level and conduct outreach and education programs related to pollution prevention and mitigation.

As participants in the triennial review process, we would like make the following comments and recommendations.

1. Extension of the wastewater disinfection period. FRWA recommends that the disinfection period be extended at least from April 1 to December 1, and preferably to year-round. The Farmington River is heavily used for recreation at all times. Anglers wade into our river to fish throughout the winter, as evidenced by our observations and by creel data collected by CT DEEP Fisheries staff (*CT Inland Fisheries Stream Anglers Surveys 2013*). Some swimmers enter the river in wetsuits during the colder months. Paddlers use the river year-round and crew teams routinely row the river from early April into December. Furthermore, two heavily-used boating access points, in Simsbury and Collinsville, are located at the points of discharge of wastewater treatment plants. In addition to immediate health hazards to recreational users, we are also concerned over the possibility (supported by scientific study) that some pathogens released in winter may remain viable in the river ecosystem until springtime or that they pass downstream and contaminate the Connecticut River and Long Island Sound ecosystems. Climate change may also contribute to higher levels of bacteria and other pathogens in surface waters between late fall and early spring if there are spells of warmer-than-average water or larger-than-average stormwater flushes. All of these factors suggest that an extended disinfection period is advisable. We also suggest that a goal be set for a full transition to disinfection by UV radiation instead of chlorination, in order to protect to aquatic life from the impacts of chlorine.

2. Ensuring consistency with section 304(a) of the federal Clean Water Act. Relative to this, we particularly recommend the following:

- That the state address non-point sources of nitrogen as well as point sources, in order to further mitigate the many ill effects of nitrogen overload such as eutrophication, toxic blooms of cyanobacteria, and the damaging effects of ammonia on freshwater mussels. We recommend that the standards follow the EPA's most protective guidelines in the *Aquatic Life Ambient Water Quality Criteria for Ammonia—Freshwater (2013)* and the nitrogen standards in the December 2009 *CT DEP Proposed Revisions to Water Quality Standards* (notes 8a, 8b, and 8c).
- That phosphorus reduction strategies continue to be developed.
- That the criteria for limits on nutrient loading include biological condition gradient (BCG) criteria as well as numeric limits. By incorporating a water body's biological community response, well-developed BCG criteria give a more precise and informative indicator of water quality than numeric data alone. We support the more detailed comments on this topic provided by the Connecticut River Watershed Council.
- That the criteria for bacterial contamination follow the recommendations in the EPA's *2012 Recreational Water Quality Criteria*.

3. Identification of all the state's High Quality Waters, as a protection against degradation. At this point in the history of CT waters, extensive re-growth of forest has allowed many surface waters to regain a high level of health and ecological function. We recommend that these waters be identified and classified as High Quality Waters, using consistent and credible criteria such as a biological condition gradient evaluation, so as to provide the protection from future degradation afforded by the provisions of the Clean Water Act. It should be added that even though such High Quality Waters are "important, unique, or sensitive ecologically," many do not currently meet the state's definition of Outstanding National Resource Waters (WQS Sec 22a-426-1 Definitions) because they are not located in state or national parks or wildlife refuges. For example, the West Branch of the Farmington River is designated a National Wild and Scenic River on the basis of "outstandingly remarkable values" yet the headwaters that supply this "outstandingly remarkable" reach cannot be classified as ONRWs. Since a state can in fact classify any water body as an ONRW, we recommend expansion of the state's definition of ONRW to include exceptional waterbodies regardless of location.

4. Expanded definition of surface waters to include "inland wetlands and watercourses" and "headwater streams." These surface waters are extremely important ecologically and FRWA recommends that they be mentioned specifically in the standards.

5. Expand the current definition of "Endangered Species" in the Water Quality Standards to include at least those listed by CT DEEP as "Endangered" and "Threatened." This guards against omission of declining species that are overdue for re-classification, or species for which we have too little data for precise classification.

6. Consideration of an additional low flow statistic in the WQS. While FRWA supports consideration of the Q99 rather than the 7Q10 as a low flow statistic, we also suggest consideration of low flow criteria that incorporate biological response to successive low flow events over the course of a year. The biological community may be more affected by successive events than by extremes.

7. Revise the current Water Quality Regulations for temperature and dissolved oxygen. At present, the DEEP Water Quality Regulations specify allowable temperature increases for surface waters according to water quality classification. Assigning allowable temperature increases on the basis of water quality alone fails to take into account the natural temperature conditions of specific water bodies and the biological communities that live in those temperatures. A better approach to minimum temperature requirements is spelled out in Appendix F, “Minimum Temperature Requirements for Cold, Cool, and Warm Water Aquatic Habitats,” of the CT DEP’s December 2009 *Proposed Revisions to CT Water Quality Standards*. This specifies “no changes from natural conditions that would impair any existing or designated uses assigned to the surface water classification for the water body” and then describes different temperature criteria for water bodies, according to the tolerances of the fish communities they naturally support. We recommend adoption of these temperature requirements. Similarly, dissolved oxygen standards should track the oxygen demands of organisms in cold, cool, and warm waters.

FRWA applauds the ongoing work of CT DEEP in reviewing and updating the state’s water quality standards. We appreciate the chance to comment and look forward to assisting in any way we can as the process moves forward.

Sincerely,

A handwritten signature in blue ink that reads "Eileen Fielding". The signature is written in a cursive style with a prominent loop at the end of the last name.

Eileen Fielding
Executive Director