



December 16, 2013

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

(Submitted via email to deep.wqsreview@ct.gov)

Subject: Triennial Review of Connecticut Water Quality Standards

Dear Mr. Hust:

The Pomperaug River Watershed Coalition ("PRWC") appreciates the opportunity to provide the following comments on the State of Connecticut's Water Quality Standards ("WQS"). We are also thankful for the time recently provided by DEEP officials to members of the environmental community as we work collaboratively not only to address this WQS review, but also to further a longer term partnership to bring additional enhancements to the WQS.

Briefly, PRWC stewards the 90-square mile Pomperaug River Watershed which includes 7 subregional drainage basins in 8 communities including much of Bethlehem, Southbury and Woodbury. PRWC is science-based in its actions which focus both on river and groundwater protection. Aquatic health and drinking water are priorities with research, education and community outreach being key tools to fulfill our mission. Partnerships with Federal agencies such as USGS, together with state and local officials and other environmental organizations are core to our success. To learn more about PRWC, please visit our website at www.pomperaug.org.

PRWC recognizes that the WQS are critical for the protection of Connecticut's water quality and aquatic resources. Our comments below are not all inclusive but rather are those that we feel not only have priority within our watershed but also will provide the basis for developing future discussion:

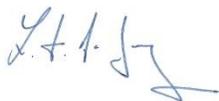
- **Disinfection Period** – PRWC supports review of an expanded disinfection period to extend beyond the May 1- October 1 timeline. Use of the rivers can begin earlier (as is the case with opening day for fishing inland waters), and extend later (many rivers are fished throughout the year). Equally important is a treatment transition goal from chlorine disinfection to an alternate disinfection such as UV to reduce negative impacts to aquatic life.
- **Hydrological-based Design Flow** – In its *Technical Guidance Manual for Performing Wasteload Allocation. Book IV: Design Conditions, Chapter 1* EPA discusses and recommends two methods for determining design flows, the hydrological-based method and the biological- based method. Although the extreme value analytical techniques used to calculate hydrological-based design

flows have been used extensively in the field of hydrology and in state water quality standards, these methods may not capture the cumulative nature of effects of low flow events. By considering all low flow events within a year, the biological-based design flow methods is said to account for the cumulative nature of the biological effects related to low flow events. As such, it may prove helpful to take another look at biological-based design flows before selecting hydrological-based design flows such as 7Q10 or Q99.

- **Nutrient Loading** – Consistent with DEEP’s antidegradation policy, conservative phosphorous limits will help prevent concentrations from significantly increasing receiving water bodies such as ponds, lakes and lower order brooks (see Carya Ecological Services, LLC letter to DEEP dated 8/3/09). While it is understood that nutrient criteria development is an issue not specific to this WQS review but rather an ongoing study within DEEP, continued careful review of *enrichment factor* and/or other phosphorous discharge limit approaches is suggested. Furthermore, on the success of the DEEP’s point source nitrogen program, PRWC encourages a focus on non-point nitrogen sources.
- **Outstanding National Resource Waters** – With the understanding that the current ONRW definition is limited to “national and state parks and wildlife refuges” (WQS Section 22a-426 1 Definitions), the definition does provide a furtherance to High Quality Waters by representing that ONRW are “important, unique or sensitive ecologically.” PRWC suggests that certain state waters are compatible with ONRW definition (other than Federal lands) and thought should be given to designating such waters within the state.
- **Climate Change** - Also understood to be outside the scope of the ongoing WQS review, PRWC requests longer term study of the impacts of climate change as they relate to the WQS. USGS Scientific Investigation Report 2011-5077 (“*Integrated Watershed-Scale Response To Climate Change For Selected Basins Across The United States*”) and USGS Scientific Fact Sheet 2011-3122 (“*Watershed Scale Response To Climate – Pomperaug River Watershed, Connecticut*”) evaluates the hydrologic response to different projected carbon emissions scenarios of the 21st century using a hydrologic simulation model. Specifically for the Pomperaug River Watershed, a Precipitation Runoff Modeling System (PRMS) was employed. Both reports can be found on the PRWC website and should prove to be a useful resource to DEEP.

I trust that the above has been responsive to your request for comment on the Triennial Review of Connecticut Water Quality Standards. Thank you not only for this opportunity to comment but also for the work you do in protecting our water resources. PRWC looks forward to continuing the effort with DEEP and the WQS collaborative as we work in partnership toward the success of longer term goals.

Sincerely,



Len DeJong
Executive Director