

April 21, 2006

Lisa McClung, Director  
Division of Water and Waste Management  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25301

Dear Ms. McClung:

As members of the Nutrient Criteria Committee, we submit the enclosed report with our rationale for nutrient criteria for West Virginia lakes and reservoirs.

Based on analyses of West Virginia data, phosphorus criteria should be between 23 and 53 ug/L, but because of data gaps it is not possible to derive one single number in this range. The number that is ultimately chosen depends on how much risk of harm is to be tolerated. A TP criterion near the low end of the range—30 ug/L mean—should protect cold and cool water lakes from most if not all harms due to nutrients. A TP criterion at the top of the range—50 ug/L mean— may well protect warm water lakes from harm, but is unlikely to protect cool or cold water lakes. **We recommend TP criteria of 30 ug/L mean for cool water lakes and 50 ug/L mean for warm water lakes.**

Chlorophyll a criteria should also be different for cool and warm water lakes. **We recommend chlorophyll a criteria of 10 ug/L mean for cool water lakes and 25 ug/L mean for warm water lakes.**

**These criteria are only sufficient if a comprehensive list of cool water lakes is included in the rule.** We propose such a list.

Expressing all nutrient criteria as means as opposed to percentiles is also crucial, as this will allow WVDEP to implement the criteria in assessment and permitting decisions.

Our recommendations are considerably **less stringent** than those recommended by the U.S. Environmental Protection Agency for West Virginia (8 ug/L TP and 2.8 ug/L chlorophyll a).

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We urge WVDEP to adopt our proposed nutrient criteria because they are based on data from West Virginia and nearby Virginia lakes, they are derived using scientifically justified methods, and they correspond to general limnological research, and they are designed to protect against harms to designated uses rather than identify the point at which harms have already occurred—as required by the Clean Water Act. Our proposed criteria will not place undue burdens on regulated industries and nonpoint sources of nutrient pollution.

We appreciate the opportunity to serve on the Committee since 2002. Please do not hesitate to contact any of us with questions about the data sources or methods used to develop these recommendations.

Sincerely,

/s/

Evan Hansen, West Virginia Rivers Coalition  
Martin Christ, West Virginia Rivers Coalition  
Margaret Janes, Appalachian Center for the Economy and the Environment  
Joseph Hankins, Conservation Fund's Freshwater Institute  
Neil Gillies, Cacapon Institute