

Hi Kari,

We wanted to pass along some of our questions and concerns resulting from the Lake Champlain TMDL Phosphorus discussion at the Rutland Library on December 11. We may have additional comments going forward, but we wanted to pass these along in a timely manner.

1. Is there a projection of how long it will take for concentrations to stabilize and reach equilibrium in Lake Champlain after adjusting phosphorus inputs into the lake? Does this take into consideration the resuspension of phosphorus from lake sediments? Assuming that the timeframe to reach equilibrium is quite long and that we have not reached it yet, what are the concentrations projected to be in the lake at equilibrium with current phosphorus inputs?
2. In the TMDL presentation on December 11, there were significant proposed phosphorus reductions shown in NY and Quebec. The fact that only the VT portion of the existing TMDL has been reopened seems to be at odds with this reduction in phosphorus contributions to the lake from NY and Quebec. Is there a plan to seek these additional reductions from these jurisdictions?
3. How will BMPs for municipal roads be implemented? Will requirements involving major improvements and substantial capital improvements be required only when reconstructing the road? If not, some of the BMPs may require investments that would be better spent in other areas.
4. Section 3.3 seems to target phosphorus removal and stormwater management through a one size fits all permit. How much flexibility will be allowed in highly developed areas? Even treating the water quality volume in areas like Rutland City may not be feasible without tearing down buildings and going through the long and expensive process of condemnation.
5. In order to regulate existing development under Section 3.3, will the State exercise their Residual Designation Authority on these properties?
6. When river corridor mapping is referred to in section 4.1, is this the same thing as a Fluvial Erosion Hazard Zone? If Fluvial Erosion Hazard Zones are going to be implemented, this should be done statewide with scientifically defensible calculations which do not take into consideration political or transportation influences and which are calibrated against major flooding and erosion events over the last 100 years. Drafting FEH Zones that identify where erosion could take place at any point in the future is too speculative. Zone parameters should be tied to a reasonable timeframe.
7. The implementation of the draft plan will require a tremendous investment. What is the estimate for full implementation and where will this money come from?
8. Many of the phosphorus calculations and projections seem to be based heavily upon computer modeling and not monitoring in the field. With systems as complex as phosphorus concentrations in Lake Champlain, it is doubtful that an accurate model could be created which would accurately predict future concentrations. It would seem to be more realistic and accurate to shift our reliance to monitoring versus modeling throughout the watershed.
9. EPA officials indicated that they could require reductions from WWTPs in lieu of or in addition to the draft plan. While the City appreciates the State's efforts to address the issue at its source(s) we remain concerned that extremely expensive requirements could be imposed on WWTPs resulting in almost no benefit. Has there been or will there be a cost effectiveness analysis undertaken to estimate the cost per ton of phosphorous abated for each plan element? If so, will this information be used to help set priorities for implementation, funding, enforcement and the like? The City, and most likely other communities are in a good position to estimate these costs and we would be happy to provide this information in support of your efforts.

Thank you for the opportunity to submit these comments. We realize that many of these questions do not have definitive answers at this point, but certain assumptions must have been made when calculating the impacts to phosphorus concentrations in Lake Champlain. We would appreciate any insight and feedback that you can provide including the assumptions that were made in these calculations

Thanks again,

Evan

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