Changes from August 2015 proposed TMDLs to June 2016 Final TMDLs

In response to public comment and further input from the State of Vermont, the final Phosphorus TMDLs for Vermont Segments of Lake Champlain (June, 2016) contain the following revisions from the August 2015 proposed TMDLs. The page number in parenthesis indicates the location in the final version of the TMDLs.

Chapter 5. Establishing Lake Segment Loading Capacities

A new paragraph was added to Section 5.2 after the equation to provide clarification and additional detail on the modeling of Missisquoi Bay. (p. 23)

Revisions were made to Section 5.4 to provide additional information on considerations of climate change on-in lake processes. (p. 26)

Chapter 6. Establishing Allocations

A revision was made to the fourth from last paragraph in Section 6.1.1 to more clearly describe that the discharges from Combined Sewer Systems, other than one treated CSO at Burlington Main, are included in the developed land portion of the wasteload allocation. (p. 29)

A revision was made to the third from last paragraph in Section 6.1.1, to provide for the possibility of future revisions to Vermont’s Wasteload Allocation Process. (p. 29)

Revisions were made to the penultimate paragraph in Section 6.1.1 to more clearly indicate EPA’s support for flexibilities Vermont will employ in permitting Wastewater Treatment Facilities. The bullet item regarding the 80% phosphorus load level was revised and a bullet was added regarding integrated planning/permitting. (p. 29-30)

The third paragraph in Section 6.1.2 was revised to clarify how the various stormwater related sources were handled in the Wasteload Allocation. (p. 33)

Section 6.1.2 was revised to clarify that Vermont’s CSO policy is being updated and converted to a rule. Additional revisions clarify that Combined Sewer Overflows are precipitation driven and should be accounted for similar to other stormwater sources in the developed land category. (p. 34-5)

A revision was made to Table 5, to better characterize the status of MS4 community mapping in the stormwater context, and to make consistent with the accompanying text. (p. 35)

A new paragraph was added before the last paragraph to Section 6.1.2 to indicate that municipalities with WWTFs, CSO and municipal wastewater may consider integrated planning/permitting. (p. 36)
The ending of the last paragraph in Section 6.1.2 was revised to clarify how agricultural stormwater discharges were included. (p. 36)

In the first paragraph in Section 6.1.2.1, for South Lake B, the basis for the reductions was changed from 100% to 85% of applicable unpaved roads. (p. 36) A footnote was added to the paragraph to note that EPA updated the scenario tool simulations for all lake segments during the period between the release of the August 2015 proposed TMDLs and final TMDL issuance. (p. 37)

The first two paragraphs in Section 6.1.2.1 were revised to clarify that the TMDLs are focused on unpaved road segments connected via direct surface flow to tributaries of Lake Champlain. (pp 36-7)

In the second paragraph in Section 6.1.2.1, the equivalent reduction percentages were revised to reflect additional analyses. (p. 37)

In the first paragraph in Section 6.2, the first sentence was revised to clarify what is included in the Load Allocation. The percent reduction figures in the remainder of the paragraph were revised consistent with additional analyses. A footnote was added to note that EPA updated the scenario tool simulations for all lake segments during the period between the release of the August 2015 proposed TMDLs and final TMDL issuance. (p. 37)

Revisions were made at the end of the last paragraph of Section 6.2.1 to be consistent with the added text about Missisquoi Bay modeling in Section 5.2. (pp. 41)

The Allocations by Lake Segment in Table 7 in Section 6.4 (p. 44) were revised as the result of additional simulations and analyses. Changes are typically less than a one ton increase or decrease. In no case is the change greater than two tons.

Table 8 in Section 6.4 (p. 45) was revised to account for the changes made in Table 7.

Chapter 7. Reasonable Assurance & Accountability Framework

In Section 7.2, the third paragraph was amended to include reference to a letter from VT DEC Commissioner Schuren. (p. 50)

In the fourth paragraph, six new bullets were added to the end of the list. (p. 51)

The third from last paragraph was amended to indicate that EPA conducted additional analyses in consideration of public comments and the decision of the Secretary of Agriculture, Food and Markets. The final paragraph was amended to include reference to the February 23, 2016 letter from DEC Commissioner Schuren. (p. 52)
In Section 7.2.1, the second paragraph was completely revised to reflect the decision by the Secretary of Agriculture, Food and Markets that BMPs are required in the Missisquoi Basin. (p. 52)

The third and fourth paragraphs in Section 7.2.1 regarding streambanks have been expanded to further describe how EPA expects Vermont’s implementation strategy will lead to reduced loads. (p. 53)

The last paragraph in Section 7.2.1 regarding measures in forested lands was revised to reflect comments from the Vermont Department of Forests, Parks and Recreation. Additions were made to include reference to Vermont’s Healthy Forest Cover Strategy. (p. 54)

In Section 7.3, in the first paragraph, the first item in the list has been amended to include reference to the February 23, 2016 letter from VT DEC Commissioner Schuren. (p. 54)

Text has been added to the last paragraph in Section 7.3 regarding the crediting of certain BMPs installed prior to the issuance of the TMDLs. (p. 55)

Section 7.3.1, has been revised to eliminate milestones in the past (i.e., 2015), and revise milestones in 2016 and 2017 pursuant to input from Vermont DEC. A sentence has been added to clarify that EPA will evaluate the substance of the milestones as well as the completion date in assessing whether a milestone has been satisfactorily completed. (pp. 55-6)

Chapter 8. Implementation

In the “Phase 1” section, the first paragraph was updated to eliminate references to 2015. The second paragraph was amended to include reference to the Secretary of Agriculture, Food and Markets decision regarding the need for BMPs in the Missisquoi Bay Basin. (p. 60)

The fourth paragraph has been revised to present the flexibilities Vermont will employ in the same manner as they are presented in Section 6.1.1. (pp. 60-1)

A new paragraph has been added at the end of the “Phase 1” section describing what will need to be considered if Vermont chooses to develop a trading program. (p. 61)

A new Monitoring Plan section has been added at the end of the chapter. (p. 63)

Chapter 9. Public Participation

The final paragraph was revised to reflect the steps taken since the August 14, 2015 proposed TMDL was made available for public comment. (p. 64)

Chapter 10. References

Five new references were added.
Appendix A

The Future Growth analysis was replaced with an October 8, 2015 version from VT DEC.

Appendix B

Revised text clarifies that EPA included retrofits above C soils for the non-road impervious cover scenarios in the Otter Creek, Main Lake, Shelburne Bay, Burlington Bay, Malletts Bay and St. Albans Bay watersheds. It also presents the results of updated reduction simulations derived from the Scenario Tool.

The analysis of loads and phosphorus reduction opportunities from forested lands was revised.