



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

September 3, 2020

Julia S. Moore, Secretary
Vermont Agency of Natural Resources
1 National Life Drive, Davis Bldg.
Montpelier VT 05620-3901

Anson Tebbetts, Secretary
Vermont Agency of Agriculture, Food and Markets
116 State Street
Montpelier, VT 05620-2901

Peter Walke, Commissioner
Vermont Department of Environmental Conservation
1 National Life Drive, Davis Bldg.
Montpelier VT 05620-3520

Re: Lake Champlain TMDL Implementation Final Report Card for Phase 1 Milestones

Dear Secretary Moore, Secretary Tebbetts, and Commissioner Walke:

EPA committed to periodically evaluate Vermont's progress toward completion of its Lake Champlain Phosphorus TMDL Phase 1 implementation obligations. As you know, the 2016 TMDL includes an Accountability Framework containing 28 Phase 1 milestones to be completed by the end of 2017. EPA issued the State a provisional pass in April 2018 based on the successful completion of 25 of the 28 milestones and the State's commitment to complete the remaining three milestones the following year. **With its recent issuance of the Three-Acre Stormwater Permit, Vermont has successfully completed all Phase 1 Accountability Framework milestones.**

The completion of the Phase 1 milestones (as documented in the attachment) sets the wheels in motion for restoration of the Lake in the years to come. These milestones are key foundational building blocks, including, among other things, the adoption of new Required Agricultural Practices to reduce phosphorus from agricultural sources, the issuance of a series of new stormwater permits to reduce phosphorus from developed land, the establishment of a long-term

funding source for clean water projects across the state, and the development of a tracking and accounting system to evaluate phosphorus reduction progress across all sectors. Completion of these foundational milestones is a major accomplishment and EPA commends the State for its dedication to this work.

While the focus of this report card is on the Phase 1 milestones, we also want to acknowledge the results of the broader suite of Lake restoration actions completed since passage of Act 64. The State has indicated in its Vermont Clean Water Initiative 2019 Performance Report that actions tracked so far have resulted in an estimated reduction of 16.4 metric tons of phosphorus per year, or about eight percent of the total reduction target. As tracking methods are further developed and the impact of new permit programs and related measures is quantified, we anticipate that phosphorus loading will continue to decrease substantially over the next five years.

While much work remains, the State's successful completion of the 2016 TMDL's Phase 1 milestones puts Vermont in a strong position to achieve the phosphorus reductions needed to restore Lake Champlain.

Thank you again for the work involved in finishing your Phase 1 milestones, and we look forward to continuing to collaborate with you on Lake Champlain protection and restoration.

Sincerely,

/s/

Dennis Deziel
Regional Administrator

Attachment

Cc (via email): Pete LaFlamme, Watershed Management Division Director, VTDEC
Neil Kamman, Water Investment Division Director, VTDEC
Laura DiPietro, Water Quality Division Director, AAFM

Attachment A
Status of 2016 and 2017 Milestones in the Lake Champlain
Phosphorus TMDL Accountability Framework

In the TMDL Accountability Framework, EPA included 28 milestones that the State of Vermont committed to meet by December 31, 2017. Sixteen of these were scheduled for completion by the end of 2016, and the remaining 12 were scheduled for completion by the end of 2017. Together, these 28 milestones were intended to capture key components of the first phase of TMDL implementation – the phase focused primarily on getting new permits and programs in place to support much of the longer-term implementation work. EPA based its assessment of milestone status on public records and two state reports of progress on Lake Champlain TMDL implementation: The Vermont Clean Water Initiative 2019 Performance Report of January 15, 2020; and the Vermont 2018 Lake Champlain TMDL Accountability Framework Report of March 7, 2018.

Year 1 (Due December 30, 2016)

No.	2016 MILESTONE	EPA ASSESSMENT OF STATUS
1	Required Agricultural Practices (RAP) revisions adopted (with expected elements)	<p>Complete</p> <ul style="list-style-type: none"> - RAPs were revised; effective date: 12/05/2016.
2	Small Farm Operation Certification program rule adopted	<p>Complete</p> <ul style="list-style-type: none"> - RAPs include a Small Farm Operation Certification Program; - Affected Small Farm Operations were required to file self-certifications by 1/31/2018; - Annual recertification.
3	Livestock exclusion incentive program in place	<p>Complete</p> <ul style="list-style-type: none"> - RAPs contain requirements for livestock exclusion; - To encourage early compliance, Agency of Agriculture, Food and Markets (AAFM) contracted with University of Vermont Center for Sustainable Agriculture Pasture Program to implement a declining cost-share program. The program is in place and field work began during the 2018 field season; - Declining cost share program offers 90% of the cost of installing livestock exclusion system in the first year, and declines by 5% each subsequent year to a minimum of 75%, with the intent of incentivizing early adoption.
4	Develop matrix and small farm template for nutrient management planning	<p>Complete</p> <p>AAFM developed a matrix of nutrient management plan (NMP) requirements for small, medium, and large farm operations.</p> <ul style="list-style-type: none"> - Large, medium, and certified small farm operations are required to implement a US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Nutrient Management Practice Code 590-standard (NMP); - Farms that are smaller than certified small farm operations must meet the nutrient management planning requirements in the RAPs; - AAFM has also developed a small non-dairy farm operation draft template for NMPs.
5	Develop Environmental Stewardship Incentive Program in priority watersheds	<p>Complete</p> <ul style="list-style-type: none"> - Program developed in 2016, offering additional incentives and recognition to farmers implementing agricultural conservation practices in addition to the RAPs; - Pilot program launched in 2018, with 10 farms enrolled;

No.	2016 MILESTONE	EPA ASSESSMENT OF STATUS
		- Full program expected to be open for farm enrollment in 2020.
6	Mandate certification of custom manure applicators	<p>Complete</p> <p>- AAFM obtained authority under Act 64 to create a custom manure applicator certification, and worked with the UVM Extension Service to run a certification program for custom manure applicators, began in 2016 and continues.</p>
7	Develop requirements for farmer training programs	<p>Complete</p> <p>- Farmers are required to obtain 4 educational credits every 8 years; - Process created for partner organizations to have their programs approved for educational credit eligibility, and approved programs are advertised through the Agriview publication.</p>
8	Issue Final Transportation Separate Storm Sewer System (TS4) permit	<p>Complete</p> <p>- Completed and adopted on 12/28/2016; - Effective date: 12/28/2016; - The TS4 permit was appealed; ANR settled the appeal, and reissued the TS4 permit, incorporating revisions agreed to pursuant to the settlement. The revised TS4 permit was adopted November 29, 2017.</p>
9	Adopt final Vermont Stormwater Management Manual	<p>Complete</p> <p>- Completed and adopted through the state administrative rule-making process on December 28, 2016; - Manual became effective on 7/1/2017.</p>
10	Forestry Acceptable Management Practices (AMP) for Maintaining Water Quality on Logging Jobs revisions completed	<p>Complete</p> <p>- Rule complete and adopted through the state administrative rule-making process; - AMPs took effect on 10/22/2016; - Further revisions entailing minor modifications occurred in 2018.</p>
11	Legislature establishes Clean Water Improvement Fund	<p>Complete</p> <p>The Clean Water Fund was established through the passage of Act 64 (2015), signed on 6/16/2015.</p>
12	Tactical Basin Plans (Phase 2) complete for Lamoille and Missisquoi basins	<p>Complete</p> <p>The Plans were approved on December 28, 2016.</p>
13	Updated Report to the U.S. Environmental Protection Agency (EPA) with spending plan cap	<p>Complete</p> <p>- The report addressed the State's investments made in clean water projects, state agencies' staffing capacity and water quality budgets; - Submitted to EPA on December 30, 2016.</p>

No.	2016 MILESTONE	EPA ASSESSMENT OF STATUS
14	Issue new Combined Sewer Overflow (CSO Rule), replacing 1990 CSO Control Policy	<p>Complete</p> <p>Rule was adopted through the state administrative rule-making process on August 25, 2016 and took effect on September 15, 2016.</p>
15	Develop TMDL implementation tracking and reporting system	<p>Complete</p> <ul style="list-style-type: none"> - Tracking, accounting and reporting system was developed June 30, 2016; - Enhancements and refinements are ongoing; - System allows for efficient tracking and accounting of phosphorus reduction activities.
16	Revise ANR/AAFM Memorandum of Understanding (MOU) for agricultural nonpoint source program	<p>Complete</p> <ul style="list-style-type: none"> - MOU completed on 3/17/2017; - Integrated three MOUs: (1) Confined Animal Feeding Operations (CAFOs) and relationship with state large, medium and small farm operations, respectively, (2) enforcement, and (3) nonpoint source pollution.

Year 2 (Due December 30, 2017)

No.	2017 MILESTONE	EPA ASSESSMENT OF STATUS
1	Nutrient Management Plan (NMP) milestones completed	<p>Complete</p> <ul style="list-style-type: none"> - Many of these nutrient management elements were included in the new RAPs; - Other elements addressed by previous notes relating to NMP matrix milestone (no. 4 in previous table), farmer trainings (no. 7) and custom manure applicator certification (no. 6); - AAFM has supported the development of GoCrop NMP development software and the courses for farmers through the Clean Water Fund grants program.
2	Targeted funding for agricultural BMP and Nutrient Management Plan implementation provided in Missisquoi Bay, St. Albans Bay and South Lake Champlain basin	<p>Complete</p> <ul style="list-style-type: none"> - Inspections, Revised Secretary's Decision (RSD) and federal priorities have led to increase in conservation practice enrollment through cost-share programs; - AAFM contracted with three partners to provide case management in these watersheds; - AAFM has given priority to these watersheds in the new Agriculture Clean Water Initiative Grant Program; - USDA-NRCS Strategic Watershed Planning effort has focused on sub-watersheds within these priority areas, resulting in increased program sign-up and implementation.
3	Report to Legislature on recommendations for tile drains	<p>Complete</p> <p>Report completed on 1/31/2017.</p>
4	Issue Final Municipal Roads General Permit	<p>Complete</p> <p>Permit signed by DEC Commissioner and effective on 1/26/2018.</p>

No.	2017 MILESTONE	EPA ASSESSMENT OF STATUS
5	Issue Final Developed Lands/Three-Acre General Permit	<p>Complete</p> <p>Permit signed by DEC Commissioner on 9/1/2020, with an effective date of 12/1/2020.</p>
6	Tactical Basin Plans (Phase 2) completed for South Lake (includes Poultney- Mettawee and Lower Lake Champlain basins)	<p>Complete</p> <ul style="list-style-type: none"> - Tactical Basin Plans scheduled for 2017 (South Lake Champlain as well as an update to North Lake Champlain) were completed; - The Plans were approved on December 31, 2017.
7	Establish long-term revenue source to support water quality improvements via CWF	<p>Complete</p> <p>Long-term revenues for lake restoration work have been established by the VT Legislature through several different provisions. The combination of these provisions is expected to generate approximately \$20 million/yr from 2020 onward. The provisions include:</p> <ul style="list-style-type: none"> - The Clean Water Fund was established through the passage of Act 64 (2015), signed on 6/16/2015 (which included \$4 million annually from the property transfer tax surcharge); - Act 85 of 2017 (Relating to making appropriations for the support of government) extended the property transfer tax surcharge revenue source from July 1, 2018 to July 1, 2027 to provide an expected \$4 million (has been generating \$5 million to date) annually to the Clean Water Fund; - S.285 of 2018 expected to provide approximately \$2 million annually to the Clean Water Fund from unclaimed Bottle Bill deposits; - Act 76 of 2019 expected to provide an additional \$12 million annually for the Clean Water Fund from revenue generated by the rooms and meals tax.
8	Revise Municipal Separate Storm Sewer System (MS4) General Permit to require existing regulated small municipalities to control discharges consistent with the TMDLs' wasteload allocations	<p>Complete</p> <p>This permit was issued in June of 2018.</p>
9	Propose amendments to RAPs to include requirements for reducing nutrient contributions from subsurface tile drainage	<p>Complete</p> <ul style="list-style-type: none"> - AAFM proposed amendments to the Required Agricultural Practices in January 2018 to include requirements for reducing nutrient contributions from subsurface tile drainage; - AAFM pre-filed its proposal for rule-making with the Interagency Committee on Administrative Rules (ICAR) on January 16, 2018; - ICAR approved the draft rule on February 12, 2018; - AAFM formally filed the rule on 2/16/2018; - Rule adopted later in 2018; - Rule includes management requirements for fields with tile drains installed, and additional requirements for new tile drain installation.

No.	2017 MILESTONE	EPA ASSESSMENT OF STATUS
10	Update the Vermont Water Quality Standards, including anti-degradation, by adding a new tier that will allow for an upward reclassification of designated uses to a new, more protective class	<p>Complete</p> <ul style="list-style-type: none"> - VT Water Quality Standards rule completed and adopted by state on 11/17/2016; - Added a new tier that will allow for an upward reclassification of designated uses to a new, more protective class, and made clarifying changes to the Anti-Degradation Policy; - Vermont Water Quality Standards were updated through the state administrative rule-making process and took effect January 15, 2017.
11	Complete education, outreach and compliance activities with farms in the Missisquoi Bay watershed, as detailed in Section III, 6 in the Secretary of AAFM February 3, 2016 Decision (RSD)	<p>Complete</p> <ul style="list-style-type: none"> - AAFM Completed education, outreach, and compliance activities with each livestock operation in the Missisquoi Bay watershed in 2015 and 2016 as detailed in Section III, 6 in the Secretary of Agriculture, Food and Markets February 3, 2016 decision; - AAFM visited every livestock operation in the Missisquoi Bay watershed in 2015 and 2016 to help them understand their farm assessment needs, and the pending RAPs and Conservation Law Foundation (CLF) petition; - AAFM is working with the CLF to ensure the effort is aligned with the Revised Secretary's Decision (RSD); - Education, outreach, and inspections are ongoing to ensure farms comply with the RAPs and achieve the goals of the RSD.
12	Commence notification of affected farms about the Assessment and Plan process as detailed in Section III, 7 in the Secretary of AAFM February 3, 2016 Decision (RSD)	<p>Complete</p> <ul style="list-style-type: none"> - AAFM commenced notification of affected farms about the Assessment and Plan process within one year of the February 3, 2016 decision, as detailed in Section III of the Revised Secretary's Decision (RSD); - AAFM sent letters out to all farms in Franklin County to let them know about the RSD; - Included RSD in nearly all presentations in the Franklin County (RAP, custom manure applicator, tile drainage, etc.).

Acronym Key

- AAFM: Agency of Agriculture, Food and Markets
- ACCD: Agency of Commerce and Community Development
- ANR: Agency of Natural Resources
- AoA: Agency of Administration
- BMP: Best Management Practices used to reduce pollution loading into surface waters
- CAFO: Concentrated animal feeding operation
- CLF: Conservation Law Foundation
- DEC: Department of Environmental Conservation at ANR
- FPR: Forests, Parks and Recreation Department at ANR
- LFO: Large Farm Operations Program at AAFM
- MFO: Medium Farm Operations Program at AAFM
- MOU: Memorandum of Understanding
- RAPs: Formerly Accepted Agricultural Practices; now referred to as Required Agricultural Practices
- RSD: Revised Secretary's Decision, the AAFM Secretary's decision regarding Conservation Law Foundation Settlement for Best Management Practice implementation in the Missisquoi Bay watershed
- SFO: Small Farm Operations Program at AAFM
- TMDL: Total Maximum Daily Load
- TS4: Transportation Separate Storm Sewer System General Permit, Issued by ANR/DEC
- VTrans: Vermont Agency of Transportation