

STATE OF VERMONT
AGENCY OF AGRICULTURE, FOOD AND MARKETS

In re: CLF Petition to Require Mandatory Pollution Control
Best Management Practices for Agricultural Non-Point Sources
Identified in the Missisquoi Basin Plan

AAFM Docket # 2014-6-04 ARM

Revised Secretary's Decision

I. Introduction and Background

On May 22, 2014 the Conservation Law Foundation (CLF or Petitioner) filed a Petition under 6 V.S.A. § 4813(a) to require that agricultural operations located in critical source areas identified in the Lake Champlain Basin Program (LCBP) report, titled "*Identification of Critical Source Areas of Phosphorus within the Vermont Sector of the Missisquoi Bay Basin*" (Study), be subject to mandatory best management practices (BMPs) in addition to the requirements of the Vermont Accepted Agricultural Practices (AAPs). CLF asked the Secretary of the Agency of Agriculture, Food and Markets (AAFM) to require the following BMPs above and beyond the AAP regulatory requirements: cover cropping, grassed waterways and critical area seeding, vegetated filter strips (buffers) of at least 25 feet along all waterways and field ditches adjoining critical source area agricultural operations, manure incorporation, conservation tillage, livestock exclusion from waterways, and conversion of tilled cropland to permanent cover. The Petition included six (6) exhibits consisting of technical reports and the state's March 2013, *Missisquoi Bay Basin Water Quality Management Plan*.

On July 18, 2014, the Secretary held a public hearing in St. Albans to provide farmers and other affected citizens with an opportunity to be heard. The public hearing process

extended until August 18, 2014 to enable farmers and interested persons additional opportunity to provide written comments.

On November 17, 2014, the Secretary issued his *Secretary's Decision* denying the request to impose mandatory BMPs on farms in the Missisquoi Bay basin. The *Secretary's Decision* included 33 findings of fact and set forth the Secretary's conclusions and rationale. The Secretary specifically identified three reasons why the CLF Petition was denied: (1) the Petition impermissibly conflicted with the United States Environmental Protection Agency's (EPA) Total Maximum Daily Load (TMDL) process then underway pursuant to the federal Clean Water Act; (2) the Petition failed to adequately document the water quality violations at issue, and failed to provide data which reasonably demonstrated that there was a correlation between the water quality violations and the farmer's or farmers' practices in order to require BMPs on specific farms; and (3) insufficient financial assistance existed to assist farmers in achieving compliance with BMPs identified in the Petition as required by 6 V.S.A. § 4813(c).¹

On December 16, 2014, CLF filed an appeal of the Secretary's Decision in Vermont Superior Court, Environmental Division. While the appeal of the Secretary's Decision was pending in the Environmental Court, the Vermont Legislature passed comprehensive water quality legislation in the form of Act 64 (House Bill 35), signed into law by Governor

¹ At the time of the Secretary's Decision, 6 V.S.A. § 4813(c) contained language that "before requiring best management practices under this section, the [Secretary] shall determine that sufficient financial assistance is available to assist farmers in achieving compliance with applicable best management practices."

Shumlin on June 16, 2015. Act 64 changes a number of the considerations underlying the November 17, 2014 Secretary's Decision.²

There has also been an additional and significant increase in the USDA Vermont NRCS base allocation funding and the State and its partners have received a federal Regional Conservation Partnership Program grant to address water quality in Vermont.

Petitioner and AAFM are in agreement on a number of issues raised by the initial CLF Petition including: that water quality in the Missisquoi Bay suffers from an abundance of phosphorus and that historical and current uses, including agriculture, transportation, development, forestry and others, have left a legacy load and continue ongoing phosphorous loading that impairs the water quality of the Bay. In light of the areas of agreement and changes to Vermont's agricultural water quality law in Act 64, which include, among others, required increasing of the regulatory threshold for all farms and additional resources for AAFM's water quality program, the state's progress toward implementing of the TMDL with the passage of the Act, and the successful leveraging of additional federal resources for water quality, the Secretary has reconsidered his prior decision on the CLF Petition.

On September 4, 2015, AAFM and CLF jointly informed the Environmental Court that they had agreed to a framework that was intended to resolve the case without further litigation and jointly requested that the court proceeding be paused to allow the Secretary to conduct appropriate notice and receive public input on this proposed *Revised Secretary's Decision* on the CLF Petition. CLF and AAFM agreed that the Secretary would consider the public input in determining the final *Revised Secretary's Decision* on the CLF Petition, and

² The Secretary views the remanded petition in light of the new legislation which reflects current public policy and supports Vermont's enhanced commitment to water quality.

could withdraw the proposed *Revised Secretary's Decision* based on such public input, if warranted. The Secretary held a public hearing on the proposed *Revised Secretary's Decision* on November 12, 2015 in St. Albans, and accepted public comment for an additional 7 days.

The Secretary makes findings of fact based on due consideration of the following: the initial CLF Petition, including its exhibits; comments from the public hearing on July 18, 2014 and written comments received by August 18, 2014; and public input received during the hearing held on November 12, 2015 and additional 7 day written comment period in connection with the proposed *Revised Secretary's Decision*. The following findings of fact also take into consideration the statutory changes in Act 64, the state's success in leveraging federal money, the impact that Act 64 has on farms and the obligations of the AAFM and the state to implement the determinations made in its TMDL, and the condition of the lake.

In particular, the Secretary notes that Act 64 sets forth processes for certification and inspections of small farms, training for Vermont's small, medium and large farms, enhanced enforcement options, and standards for required agricultural practices and best management practices. Notably, Act 64 removes the provision previously found in 6 V.S.A. § 4813(c) that to require implementation of BMPs, the Secretary had to find that sufficient financial assistance was available to assist farmers in achieving implementation. Pursuant to Act 64, 6 V.S.A. § 4813(a) now states that when BMPs are required on a farm, the Secretary must "inform a farmer of the resources available to assist the farmer in implementing the BMPs."

II. Findings of Fact

A. Basin Planning Process

1. Vermont's basin planning is administered by the Department of Environmental Conservation (DEC) under authority of chapter 47 of Title 10 for water pollution control. Basin plans are prepared by the Secretary of the Agency of Natural Resources (ANR) for each of Vermont's 17 basins in conjunction with the basin planning process required by the federal Clean Water Act (CWA). The Legislature has delegated discretion to the Secretary of ANR to determine what degree of water quality and clarification should be obtained and maintained for certain waters, and be managed and enforced under the ANR Secretary's supervision.

2. The DEC has developed a 6-step process in a regulatory strategy to monitor and assess the protection and restoration of Vermont's waters by highlighting the projects or actions needed to protect or restore specific waters and identify appropriate funding sources to complete the work. These basin plans identify and prioritize sub-basins of Vermont's major watersheds for enhanced monitoring, assessment, planning, and project development within the life cycle of each plan.

3. Basin plans are data driven, and are developed then updated on a five-year cycle as specified by the Water Quality Standards and as required by 10 V.S.A. § 1253(d). The underlying concept of the basin planning process is to focus resources and attention on a more concentrated area in a more coordinated fashion so that efficient utilization of resources such as technical assistance and funding can be achieved, and water quality can be protected or improved in a cost effective manner.

Coordinating with interested public and private groups is an integral part of the basin planning process.

4. The 2013 water quality basin plan for the Missisquoi Bay basin was prepared under 10 V.S.A. § 1253(d), Vermont's Water Quality Standards, the federal Clean Water Act and its federal regulations at 40 C.F.R. § 130.6.1.

5. The major tributary rivers of the Missisquoi Bay watershed are the Missisquoi River, Black Creek, Tyler Branch and Trout River, and the Rock and Pike Rivers. The Vermont portion of the Missisquoi Bay watershed, which is shared with the Province of Quebec, is 767,000 acres.

6. The collaborative planning process for the Missisquoi Bay basin started in 2005 with a series of public meetings designed to hear water quality concerns and begin discussing possible solutions. Farmers, foresters, business owners, municipal officials, anglers, local watershed and lake organizations, environmental advocates, teachers, and regional planners participated in the planning process. A watershed council investigated the identified water quality concerns and recommended potential strategies to address those concerns.

7. Commencing in 2006, the watershed council met several times to complete the strategies. A watershed coordinator and staff from AAFM developed draft water quality improvement strategies for the agricultural sector of the plan. With facilitation assistance from the Northwest Regional Planning Commission (NRPC) staff, the council discussed the draft strategies and commented on their relative priority for implementation.

8. The *Missisquoi Bay Basin Plan* (Basin Plan), which was adopted in March 2013, is a very detailed, scientifically-based, 93-page plan which focuses on the Vermont portions of the Missisquoi, Rock and Pike River watersheds. The Basin Plan's goal for the Missisquoi Bay and all of the waters in its drainage basin is sustained ecological health and human use by meeting or exceeding state water quality standards, including targets for phosphorus loading and in-lake phosphorus.

9. The key component of the Basin Plan is the implementation schedule which includes a 14-point agricultural action component designed to strategically apply best management practices and increase outreach programs to reduce sediment, phosphorus and pathogens from agricultural activities within the basin. As actions are completed, updates are added to the Basin Plan on an ongoing basis.

10. The AAFM actively participated in developing the Basin Plan.

11. As part of the basin planning process, Stone Environmental, Inc. conducted a study, published in 2011, to identify critical source areas (CSA) in the Missisquoi Bay basin for cost-effective and efficient land treatment efforts in that basin to reduce phosphorus loads.

12. Although the study has limitations, it credibly identified agricultural non-point sources as a leading contributor to nutrient and sediment loading to the Bay, along with stream bank erosion.

13. The study assumed no BMP implementation had occurred. Despite the voluntary implementation of various BMPs by some farms in the study area over the years, however, water quality is still impaired in the Missisquoi Bay basin.

14. The study's modeling is a prediction of areas at risk of contributing phosphorous pollution. Users of its maps since the study was published in 2011 confirm that current site assessments are needed to ground-truth the modeled results. The study is a vital resource for guiding the AAFM's activities within the watershed, and is to be viewed as a part of a broader CSA methodology and as an important screening tool to guide the deployment of on-the-ground work by state and federal entities, extension service, non-governmental organizations, farmers groups, and farmers.

15. The study is the best information developed, to date, of predicting where the implementation of BMPs is most likely to make a difference in reducing non-point source phosphorous pollution from agricultural operations. It also verified that certain enhanced field practices offer more benefits than others when strategically deployed.

16. Each farming operation is different. Site specific analysis using tools like the APEX model, in concert with Nutrient Management Plans tailored to each farm's characteristics and operating needs, will best determine which specific BMPs will most benefit water quality when implemented on a particular farm. Strategically placed BMPs provide the greatest potential in reduction of phosphorus contribution to the watershed.

17. Farms have incentives to implement BMPs on a targeted basis, beyond the water quality benefits. A farm's loss of nutrients or soil due to run off and erosion negatively impacts a farm's productivity and ultimately its economic viability.

18. Subsequent to the study's published results in 2011, state and federal entities, non-governmental organizations, and farmers' groups have continued working in concert to re-focus their efforts conducting outreach and site specific assessments, technical assistance, and existing professional and financial resources to achieve implementation of BMPs on farms that are confirmed to be CSAs.

B. Act 64 implements the TMDL Phase 1 Plan and CLF's Petition is consistent with that effort

19. Act 64 requires the Secretary to "implement and enforce agricultural land use practices in order to satisfy the requirements of 33 U.S.C. § 1329 that the State identify and implement best management practices to control nonpoint sources of agricultural waste to waters of the State." The Act empowers the Secretary to "require any person engaging in farming to implement a BMP" when necessary to achieve water quality goals.

20. Act 64 requires that the Secretary must "inform a farmer of the resources available to assist the farmer in implementing the BMPs." However, the required implementation of BMPs is not contingent upon the availability of financial assistance.

21. In anticipation of the legislation and the state's responsibilities under federal law, AAFM worked with DEC and other stakeholders, including farmers, to develop a comprehensive plan to reduce phosphorous discharges within the basin from non-point agricultural sources as required by federal law. The "Vermont Lake Champlain Phosphorous TMDL Phase I Implementation Plan" (Phase 1 Plan) for the Lake Champlain Phosphorous TMDL reflects the product of that work and the new requirements of Act 64. The Phase 1 Plan describes state commitments and timelines

to implement the TMDL. The Phase 1 Plan, which contains actions and requirements similar to what CLF requested in its Petition, has been submitted to EPA by the State of Vermont for EPA's consideration in developing the TMDL.

22. The Phase 1 Plan commits to targeted implementation of BMPs in critical source areas, funding for targeted BMPs and Nutrient Management Plan requirements, and increasing the base regulatory standards in the *RAPs* (formerly called Accepted Agricultural Practices (AAPs) prior to Act 64 of 2015)³, which are applicable to all farming operations regardless of size or type.

23. The Phase 1 Plan commitment to increase the base regulatory standards in the *RAPs* includes: 25' vegetated buffers along all perennial streams, the exclusion of livestock from perennial streams where erosion is prevalent, and a reduction in field tolerable soil loss for fields in annual crop production from 2T to T.

24. The BMP implementation called for by the CLF Petition for the Missisquoi Bay watershed is consistent with the actions required under Act 64 to implement the Phase 1 Plan, which is designed to meet the obligations of the TMDL.

25. There is a need for education and outreach about the regulatory requirements of the *RAPs* and the benefit and necessity of BMP implementation in the basin to meet water quality goals. Act 64 requires, among others, that the Secretary adopt by rule requirements for training classes or programs for owners or operators of small, medium, and large farms certified or permitted under Vermont law, and increased regulatory standards within the *RAPs*.

³ To avoid confusion, this decision uses the new term "RAP."

III. Discussion and Conclusions

Having considered the above, the Secretary hereby WITHDRAWS the *Secretary's Decision* dated November 17, 2014 and GRANTS, as specifically set forth below, the CLF Petition. Implementation of BMPs on farms in the Missisquoi Bay basin shall be subject to the education, assessment and required implementation process set forth below:

1. Given the current condition of the Missisquoi Bay, the Secretary makes the threshold determination that, under 6 V.S.A. § 4813, BMPs are generally necessary in the Missisquoi River watershed ("the Watershed") to achieve compliance with water quality goals in 10 V.S.A. § 1250 and any duly adopted basin plan.
2. BMPs are site specific conservation practices beyond those required by the *RAPs* for preventing the potential of agricultural pollutants to enter waters of the state or groundwater. BMPs may include, but are not limited to, conservation practices such as: expanded perennial vegetated buffers, increased stabilization of field borne gully erosion, achievement of "T" or better soil loss as defined by the USDA's NRCS for prevalent soil type for farm fields in annual crop production, increased livestock exclusion requirements, manure injection, manure incorporation, cover cropping, and/or improvement to farm infrastructure or practices for managing or reducing nutrients and waste.
3. The AAFM will conduct Assessments of farms in the Watershed pursuant to the terms of this *Revised Secretary's Decision* and will assure the implementation of BMPs on specific farms in accordance with the framework and timeframes set forth in the paragraphs below.
4. "Assessment" means an evaluation of a farm that shall include all relevant information, which may include review of geographic information, nutrient management plans, critical source data, and site specific inspection of farm infrastructure and field practices, and consultation with technical experts including those employed by the USDA NRCS, to determine the infrastructure and conservation

practices needed to prevent the potential for agricultural pollutants to enter waters of the state or groundwater.

5. Assessments will be conducted to implement the threshold determination that, under 6 V.S.A. § 4813, BMPs are generally necessary in the Watershed to achieve compliance with water quality goals in state law. However, in certain instances, an Assessment may conclude that the practices required by RAPs are sufficient and BMPs are not required for a specific farm due to the farm's physical and operational characteristics, its proximity to surface water, and the farm's current implementation and maintenance of RAPs that prevent the potential for agricultural pollutants to enter waters of the state or groundwater.
6. During the first year after the date of this *Revised Secretary's Decision*, the AAFM will engage in education, outreach and compliance activities with farms in the Watershed on the requirements in the RAPs, the relationship between the RAPs and BMPs, the threshold determination that BMPs are generally required, the Assessment and Plan process, the availability of financial assistance for Plan implementation, the provisions of Act 64, and Vermont's on-going efforts needed to achieve compliance with the water quality goals in 10 V.S.A. § 1250 and any duly adopted basin plan.
7. Commencing one year from the date of this *Revised Secretary's Decision*, the AAFM shall annually, for a period of three years, notify permitted Large Farm Operations (LFOs), Medium Farm Operations (MFOs), other farm operations that ship milk, small farm operations required to be certified pursuant to Act 64, and other farms subject to regulation under Title 6, chapter 215 known to AAFM operating within the Watershed, of the Assessment and Plan process to implement conservation practices to prevent the potential for agricultural pollutants to enter waters of the state or groundwater. The AAFM will make reasonable efforts to provide any other farms within the Watershed that are currently unknown to AAFM with notice. The notice shall encourage the farms to collaborate with the AAFM and farm service providers, including nutrient management planners, NRCS, and UVM Extension. The Secretary

may, in his or her sole discretion, determine the most efficient and cost effective means of providing notice.

8. The AAFM will use tools and resources available to it, including, as appropriate, the CSA study entitled, "*Identification of Critical Source Areas of Phosphorus within the Vermont Sector of the Missisquoi Bay Basin*," and other data or factors to prioritize completion of Assessments within the Watershed.
9. The Secretary may prioritize the schedule of Assessments to assure completion of Assessments for: (i) all medium and large farm operations and small farm operations that ship milk in the Watershed within 6 years of the date of this *Revised Secretary's Decision*; and (ii) all other livestock farms subject to regulation under Title 6, chapter 215 (including manure application locations) within the Watershed that are known to the AAFM as soon as practicable given its annual resources, but during a period of time not to exceed 10 years following the one year provided for completion of the education, outreach, and compliance requirements of paragraph 6.
10. Upon completion of the Assessment confirming that BMPs are necessary for a particular farm, the farm owner or operator must timely develop and submit a plan (the "Plan") for implementation of BMPs to the AAFM within a timeframe determined by AAFM. AAFM shall set the due date for Plan submission on a case-by-case basis, but in no event shall the due date exceed 180 days from the completion of the Assessment. The Plan shall include a schedule for implementation of BMPs as soon as reasonably feasible, commencing no later than within one year of the Assessment and not to exceed 10 years from the date of completion of the Assessment. If the farm intends to rely on state financial assistance for BMP implementation, the Plan shall also be accompanied by the farm's application(s) for state financial assistance. Farms not intending to rely on state financial assistance for BMP implementation may be required by the AAFM to demonstrate the financial means to implement the Plan. The AAFM may approve the Plan as submitted, modify it with additional required conservation practices, or may reject the Plan and require the farm to resubmit the

Plan. If the AAFM rejects the Plan, it shall advise the farm why the Plan is deficient and require the farm to submit a new Plan. The AAFM will determine the sufficiency of the Plan within 90 days of either initial submittal or resubmittal from the farm.

11. If the farm applies for financial assistance from the State to implement its Plan and is eligible for such financial assistance, the AAFM shall place the farm on a priority list for financial assistance administered by the State. The farm shall begin implementing all aspects of the Plan that are not contingent on financial assistance to complete, consistent with the time frames approved in the Plan and paragraph 10.
12. The Secretary shall compile and maintain an agricultural financial assistance priority list documenting pending, unfunded applications for state financial assistance in implementing BMPs in the Watershed. In establishing this priority list, the Secretary is not limited to the order in which applications have been submitted and, in his or her sole discretion, may rank the pending applications based on factors such as, but not limited to, the risk to water quality, the BMPs necessary, costs and need. The Secretary may extend a farm's schedule for implementing its Plan for up to 5 years (beyond the initial 10 years from the date of the Assessment), if the Secretary determines, in his or her sole discretion, that the farm's request for financial assistance cannot be adequately addressed with existing or expected public resources within the original implementation schedule and a failure to extend the implementation schedule will likely cause financial hardship to the farm.
13. When an Assessment confirms that BMPs are needed for a specific farm, but the farm does not timely submit a Plan as contemplated under paragraph 10, the AAFM shall exercise its existing authority to require the farm to implement the BMPs needed to prevent the potential for agricultural pollutants to enter waters of the state or groundwater as soon as reasonably feasible and pursuant to a schedule that in no event exceeds 5 years from the date of the Assessment.

14. Notwithstanding any of the above, whenever the Secretary believes that any person engaged in farming is in violation of chapter 215 of Title 6, rules adopted thereunder, or a permit or certification, the Secretary may initiate an administrative enforcement action or request that an action be brought in the name of the AAFM in a court of competent jurisdiction pursuant to 6 V.S.A. § 4995.
15. The Secretary acknowledges that the ability of the AAFM to meet its obligations under this *Revised Secretary's Decision*, including any public financial assistance to farms for implementation of BMPs, will necessitate continued resource allocations from the Vermont Legislature and the federal government, including NRCS. If the Secretary of AAFM determines that inadequate resources exist within the agency to meet the obligations in the *Revised Secretary's Decision*, the Secretary shall report such determination to Petitioner CLF, the Secretary of Natural Resources, the Governor, and the Vermont Legislature.
16. Nothing in this *Revised Secretary's Decision* prevents or precludes the Secretary of AAFM from re-deploying agency resources to address as necessary emergency agricultural water quality issues in other watersheds in the state or prevents or precludes the Secretary from re-negotiating in good faith with Petitioner CLF any term or timeframe contained herein. However, any such redeployment shall not modify the specific terms of this *Revised Secretary's Decision*.

SO ORDERED.



Chuck Ross

Secretary of the Vermont Agency of Agriculture, Food and Markets

Date of Entry: 2-3-16