

TMDL Recommendation Report

Approved – November 5, 2014

1.0 Introduction and approach

A clean Lake Champlain is of vital importance to all Vermonters, and in particular to residents of Chittenden County, where the most populous lakeshore communities reside. To address nonpoint source phosphorus pollution issues, the U.S. Clean Water Act calls for a Lake Champlain Phosphorus Total Maximum Daily Load (TMDL), a plan that caps the amount of phosphorus allowed to enter different parts of Lake Champlain and allocates those maximum amounts to various sources within the Lake Champlain Basin so that the Lake can meet its water quality standards for all its intended uses. Because current phosphorus inputs to the Lake are too high, the TMDL will require wide-ranging and innovative measures to reduce the amount of phosphorus leaving the land and entering the Lake. These measures will affect virtually all sectors of the community.

Pursuant to a Draft Vermont Lake Champlain Phosphorus TMDL prepared earlier in 2014, the Vermont Agency of Natural Resources (ANR) and the Vermont Agency of Agriculture, Food, and Markets (AAFM) have prepared a *Draft Phase I Implementation Plan* (May 29, 2014) that presents an outline of the State's policy commitments to provide reasonable assurance that the goals will be achieved. ANR has requested review and comment on this draft plan.

In June, 2014, the Chittenden County Regional Planning Commission (CCRPC) began to study the TMDL documents, including the *Draft Phase I Implementation Plan* in order to offer comments and recommendations to ANR on specific elements of the draft Plan. The CCRPC recognizes that because the majority of nonpoint source phosphorus comes from agricultural land and activities, much of the TMDL should be focused on reducing these agricultural sources, including regulatory measures if current voluntary programs do not achieve necessary progress. Because Chittenden County is the most urbanized region of the Lake Champlain Basin, the RPC's comments below mainly address issues of developed land and transportation systems of concern to our municipal members.

Section 2.0 below presents what CCRPC believes are important principles that should guide the development and implementation of specific policies and programs for the TMDL. Subsequent sections address individual components of the Draft Phase I Implementation Plan and present questions and recommendations applying to those components.

2.0 Principles

CCRPC recommends that the following principles guide the specific policies and programs implementing the TMDL.

- 2.1. Restoring and improving clean water for future generations depends on controlling non-point sources, avoiding water quality degradation, and continuing to provide effective wastewater treatment all in a cost-effective manner.

- 2.2. The state must provide financial and technical support to municipalities to supplement local resources in order to implement the Clean Water Act and its associated TMDLs through locally appropriate watershed plans and water management provisions that promote the health of the economy and the environment.
- 2.3. All Vermont municipalities benefit from clean lakes and rivers. Implementation of TMDLs for waters of the state, including Lake Champlain, must ensure that public dollars are spent in the most fair, effective, and efficient manner to reduce phosphorus and other TMDL regulated discharges. Vermont must achieve tangible progress in reducing phosphorus and other TMDL regulated discharges. All potential mitigation efforts should undergo a cost-effectiveness analysis, and implementation should be prioritized in a manner that considers that analysis and other relevant factors. This analysis should also prioritize across TMDL permit sectors within the basin.
- 2.4. The legislature must direct ANR to work closely with the Environmental Protection Agency (EPA) to develop a reasonable TMDL implementation plan for phosphorus for Lake Champlain that will lead to a cleaner lake, a more vibrant landscape, and a healthy economy. State policy must not needlessly require municipalities to construct or upgrade treatment plants that meet the highest available technical standards for discharges to impaired waters, regardless of cost, because doing so won't measurably improve the health of those waters or significantly advance TMDL compliance. Rather, it will force municipalities to bear a disproportionate share of costs. Instead, state and local governments, developers, farmers, and other stakeholders must reduce runoff from non-point sources. This should not be taken to mean that needed improvements to wastewater treatment facilities should not be made. (This principle is articulated in more detail in the Governor's commitment letter of May 29, 2014.)
- 2.5. The existing NPDES permit holders are already making significant investments. Other proposed permit sectors need to share equally in the effort and burden.
- 2.6. Each regulated entity should only have one stormwater permit to address non-point source pollution. No new permits should be required for entities already having a NPDES permit. Any new requirements should be included in amendments to those existing permits. For municipalities without an NPDES permit, any new requirements should be combined into one permit.
- 2.7. New Permit programs and technical requirements implemented in support of the TMDL should be based on the Lake or at least river basin watershed unit, rather than applied piecemeal by individual municipalities. This principle is particularly applicable to road permits, river corridors, and floodplains that commonly cross jurisdictional boundaries. The idea is to facilitate targeting of improved management to critical source areas, rather than to require some base level of treatment across the board.
- 2.8. The permitting program should allow for offsets or nutrient trading across watersheds, across different sources of pollution (e.g. agriculture vs. developed land), and between point and non-point sources of pollution (with an adequate margin of error). DEC's proposal to study a cap and trade system announced on October 24, 2014 is a necessary step in this direction.

- 2.9. DEC should provide structure, coordination, and guidance to assure technical consistency of measures implemented across watersheds and municipalities. Information, education, and training should be provided to municipalities on how to identify problems, set priorities, and develop site-specific actions. Some such efforts are already underway, e.g., development of remote sensing information and inventory methods for municipalities to identify and prioritize high-risk areas of erosion from local roads.
- 2.10. ANR must work with municipalities and the EPA to implement the “Integrated Planning Approach Framework” that provides for municipalities to prioritize Clean Water Act responsibilities and necessary investments in compliance, according to greatest need and benefit. As noted by EPA, *“the integrated planning approach is not about lowering existing regulatory or permitting standards or delaying necessary improvements. Rather, it is intended to be an option provided to help municipalities meet their CWA obligations by optimizing the benefits of their infrastructure improvement investments through the appropriate sequencing of work.”* DEC should provide a clear role for involving municipalities (with RPC assistance as needed) in project prioritization for any additional state or federal funding as part of the basin plan development process.
- 2.11. As part of the planning process, DEC should develop a system that encourages municipalities to coordinate their water quality improvement efforts, including funding and priority setting, particularly on roads, other transportation facilities, and developed areas that cross town boundaries. The planning system should also allow the integration of stormwater master plans, town road management plans, and impervious surface management plans, flow restoration plans, and other plans as appropriate to minimize the number of separate plans needed. RPCs should be available to provide assistance to their member municipalities upon request and as appropriate.

3.0 Recommendations regarding proposed program improvements

3.1 Municipal road permits¹

DEC will issue a stormwater general permit covering municipal roads. The permit will require development of management plans based on local road conditions including road slope, connectivity to receiving waters, and other factors, that identify the type and scope of BMPs necessary for the municipality. The management plan will include an implementation schedule informed by sub-watershed phosphorus reduction priorities. At a minimum, BMPs shall be as protective as those identified in the 2011 Town Road and Bridge Standards and focused on the prevention of erosion and the transport of sediment containing phosphorus.

Questions:

1. How do we integrate the municipality’s capital planning process with the basin plan priorities so that we take advantage of roads that are already planned for improvement?
2. Are municipalities expected to add new road projects to their capital plan/program or will this influence priorities at the municipality schedule?

Recommendations:

¹ Text in italics denotes text from Draft Phase I plan, May 29, 2014

1. Any new requirement should be included in the existing permit if there is one or combined into one permit so that there is only one permit per municipality.
2. Additional state and federal funding is needed to invest in additional projects to improve the priority local roads.
3. Rename “management plans” to better convey the idea that the town is required to develop conceptual design improvements for priority roads in their capital plan/program that would then qualify for and be approved for additional state funding and assistance in development of final engineering plans.

3.2 Existing developed land stormwater management

Stormwater runoff from existing developed land, exclusive of surfaces regulated under the State or municipal roads stormwater programs, will be addressed in a staged and prioritized manner through a system of watershed-based stormwater permitting using a combination of state law and NPDES-based regulatory authority.

The first stage of implementation will require permit coverage for all stormwater discharges on sites where impervious surfaces exceed 3 acres. Additionally, impervious surfaces discharging to municipal stormwater systems where such impervious surfaces exceed 15 acres, in aggregate, and the density of impervious surface is greater than 7%, shall be addressed by a stormwater permit, issued to the municipality and requiring implementation of a stormwater management and phosphorus control plan. These are preliminary criteria that may require refinement during future implementation plans to ensure targets are met.

Stormwater management practices will be consistent with the Vermont Stormwater Management Manual, with an emphasis on surface infiltration where feasible to maximize phosphorus reduction.

Questions:

1. Could this apply to less than 3 acres if it was shown that the site was a critical source?
2. What will be the monitoring system for this?
3. Are under-drained infiltration systems considered infiltration?
4. How do individual site owners work through a town to move forward in this structure?
5. Explain and elaborate on the process for delineating the qualifying areas of >15 acres impervious surface.
6. Explain and elaborate whether measures applying to existing developed land will take the form of regulatory enforcement on private property owners or will this be a municipal obligation. More discussion about how this will be enforced would be helpful (liens, etc).
7. How will this apply to existing private roads that did, or did not, have previous stormwater permits?

Recommendations:

1. Any new requirement should be included in the existing permit if there is one or combined into one permit so that there is only one permit per municipality or property owner.

2. Technical assistance is needed for condo and homeowner associations. Templates or guides or generic plans for these groups would be helpful.
3. These permits must be clearly linked to the basin plan priorities and compete against other types of priorities for available funding.
4. The municipal stormwater and phosphorus control plan should be clearly integrated with the basin plan priorities.

3.3 New development stormwater permits

This strategy is implemented via DEC's post-construction stormwater permit program. DEC's Stormwater Program administers a post-construction stormwater permit program pursuant to state statute. Regulated projects are required to implement BMPs in accordance with the Vermont Stormwater Management Manual (VSMM). The final adopted Manual will employ state-of-the-art stormwater BMPs designed to maximize phosphorus removal. These practices combined with Vermont's regulatory program that requires permits for all new and redevelopment projects with over one acre of impervious surface, as well as expansions greater than 5,000 square feet, will prevent substantial phosphorus loading.

Questions:

None.

Recommendations:

1. Complete update of this manual as soon as possible.
2. Increase the level of enforcement and establish effective penalties on erosion and sediment control plans.

3.4 Non-regulatory stormwater management

Stormwater Master Planning (SWMP) is an analytical process designed to prevent and reduce stormwater runoff from the impervious areas that are currently not regulated by the DEC. The process serves as the basis for targeting management actions in areas of the developed landscape thought to be critical sources of phosphorus. The process directs a variety of mitigation actions, including Green Stormwater Infrastructure and Low Impact Development approaches, and promotes municipal adoption of the Vermont League of Cities and Town's model stormwater ordinance to protect water quality and save municipalities money by avoiding the increasing costs of collecting and treating stormwater runoff. Recommended actions identified by a stormwater master planning process are then integrated into tactical basin plans.

Questions:

1. Under what circumstances/criteria will DEC exercise its authority to designate a non-MS4 area for compliance with MS4 requirements?
2. Is there a role for RPCs in the GIS analysis?
3. Would these stormwater management plans take the place of the management plans in 3.1 and the pollution control plans in 3.2?

Recommendations:

1. Consider adding private roads to the GIS modeling.

3.5 Minimizing river corridor and flood plain encroachments and restoring riparian buffers

DEC will use existing statutory authority to manage the program, including the development of Flood Hazard Area and River Corridor Rules, Protection Procedures, and General Permits, and Inter-Agency Floodplain and River Corridor Management MOUs.

Questions:

1. Will ANR actively pursue MOUs with other state agencies, including Agriculture, to regulate developments within their purview to be consistent with or more stringent than the National Flood Insurance Program (NFIP)?
2. Has the impact on the use of federal cost share been evaluated when considering new mandates for agriculture operations in riparian corridors?

Recommendations:

1. CCRPC supports the DEC recommendation to train and certify floodplain technicians to assist municipalities and landowners in floodplain protection and to make available enhanced model bylaws that exceed the NFIP minimum requirements
2. CCRPC supports the DEC recommendation to implement an outreach program to promote cross-agency, flood resiliency planning, peer-to-peer learning, and community progress barometers to increase Vermont municipal adoption of enhanced floodplain, river corridor, and riparian buffer protection bylaws and other mitigation measures to minimize flood risks and maximize floodplain and riparian function.
3. FEH zones and maps need to be produced and publicized as soon as possible.

4.0 Recommendations regarding proposed funding and prioritization

Recommendations for program funding below represent a list of ideas, not necessarily tied to any particular component of the TMDL implementation plan.

General:

Resources needed to achieve our clean water standards should include existing federal funds, existing state funds, and new federal and state funds. Any new revenue should be dedicated to the highest priority projects that provide the most benefit per dollar and may be required under TMDL requirements. Existing funding should be used to incentivize participation in the TMDL programs and permits.

Potential funding sources:

We support a statewide revenue generation mechanism that is easy to implement, such as a per parcel or per acre fee. Consideration might be made for land use types, impervious cover and existing water quality improvement investments, if feasible.

Municipalities and other existing NPDES permit holders must be given credit for investments that are already being made (such as through a municipality's stormwater utility) so that property owners do not have to pay twice.

Transportation specific funding sources should also be considered (like car rental fees, surcharge on registration, increase gas tax). A portion of state funding for local transportation could be dedicated to water quality improvements that are prioritized on a statewide or watershed basis.

Consider an additional tax or fee on rooms, without increasing the meals tax.

Consider an additional tax or fee on moorings, marinas.

Our member municipalities are concerned about having to be responsible for the collection of any such fee on property owners, particularly since it will require payment by owners currently exempt from property taxes. We prefer fees be collected directly by the state or some other effective means. If municipalities are tasked with fee collection, provisions should be made so that municipal costs of collection are recovered.