Restoring Lake Champlain

A Commitment to Clean Water

Phosphorus pollution threatens clean water in Lake Champlain and waters throughout Vermont.

Sources of phosphorus pollution include runoff and erosion from farmland, barnyards, construction sites, parking lots, roads and other developed areas, unstable stream channels, and logging roads. Excess phosphorus increases algae growth, which can make the lake unsuitable for recreation and increases the cost of drinking water treatment. Clean water is critical to our economy, health, and quality of life.

> Phosphorus Pollution Sources in the Lake Champlain Basin (Data Source: TetraTech, 2015) Sewage Treatment Plants 4% Developed Lands 13% Unpaved Roads 5% River Instability 21% Agricultural Lands 41%

To achieve clean water we must meet new phosphorus pollution limits.

The Lake Champlain Basin, shown in blue,

is the land area that

drains³ water into Lake³Champlain.

In June 2016 the US Environmental Protection Agency set new phosphorus pollution limits (or Total Maximum Daily Loads - TMDLs) for Vermont segments of Lake Champlain. The Phase 1 Implementation Plan serves as the roadmap for meeting these new limits. The phase 2 plans, Tactical Basin Plans, identify specific pollution reduction actions to implement.

"All in" - we are all part of the solution.

Whether you are a landowner, farmer, municipal official, developer, or logger, as Vermonters, we all have a responsibility to ensure a legacy of clean water for future generations. Our efforts to achieve clean water require a long-term commitment.

Learn more at www.cleanwater.vermont.gov anr.cleanwatervt@vermont.gov • (802) 828-1556



Invest in Clean Water, Invest in our Economy

Meeting the new federal pollution control limits for Lake Champlain, and restoration efforts elsewhere across the State, require **major new investments from a broad spectrum of stakeholders** including municipalities, farmers, businesses and other property owners to control water pollution.

The Vermont Clean Water Fund, established with three years of seed funding (from a surcharge on the Property Transfer Tax), helps stakeholders take action to restore clean water.



Federal, state, local and private dollars support actions to restore clean water. The Clean Water Fund helps the state provide for a greater share in those costs.

Did you know?

Tourism spending in the Champlain Valley totals 2.3 - 2.9 billion annually

Did you know?

Property values in towns along Lake Champlain total nearly 2 billion

Investing in Clean Water Legislative Report Timeline



The Office of the State Treasurer, in consultation with state government agencies, is preparing a legislative report that **recommends revenue sources to provide the Clean Water Fund with adequate and sustainable funding. We need your input on this report.**



VERMONT

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THE ECONOMIC IMPACT OF CLEAN WATER

Water quality in Lake Champlain is a key economic driver, supporting tourism, property values and employment. A decrease in lake water quality could result in long-lasting negative impacts to the regional economy.



Lake Champlain Phosphorus TMDL

(TOTAL MAXIMUM DAILY LOAD)

Requirements for Municipalities

WASTEWATER

Wastewater Treatment Facilities

Of the 59 Vermont wastewater treatment facilities in the Lake Champlain Basin, 25 will receive new reduced phosphorus limits according to a permit reissuance schedule that is based on DEC's five-year tactical basin planning schedule. Flexible options to meet the TMDL include:

- Require new or upgrade treatment facilities only when the current phosphorus discharge exceeds 80% of the facility's annual phosphorus allocation.
- Employ annual average phosphorus loading rates (rather than concentration limits) to set TMDL-based discharge permit limits in order to allow operational flexibility in attaining the limits.

STORMWATER

Municipal Roads General Permit

The new general permit for all municipal roads will go into effect before January 2018, with all municipalities signed up no later than 2021. Municipalities will be "credited" for projects implemented before the permit goes into effect. The general permit will require:

 Practices to reduce erosion and stormwater discharges being generated from roads and drainage systems. New roads will likely continue to be permitted as they are now. All practices will be consistent with the VTrans Road and Bridge standards.

- Establish compliance schedules that couple phosphorus upgrades with other planned facility construction projects to enhance cost-effectiveness.
- Support opportunities to reallocate (i.e., trading) phosphorus limits for facilities within the same lake segment watershed as long as total permitted phosphorus discharge remains the same. Discharges in the Main Lake, Burlington Bay, and Shelburne Bay watersheds will be considered to be discharges to the same lake segment for reallocation purposes.

Administrative processing fee: \$240; application review fee: varies; annual operating fee: \$0.003/gallon of permitted flow (\$200 minimum; \$12,500 maximum). See website for details: http://www.watershedmanagement.vt.gov/wastewater.htm

- A management plan to oversee implementation and bring roads up to standards over several years. The general permit will not require separate approval for every maintenance activity or upgrade.
- Application fee: \$400; annual operating fee: \$2,000.

Municipal Separate Storm Sewer System (MS4) General Permit

Municipalities that have municipal separate storm sewer system (MS4) permits will require a new MS4 general permit. New components to the permit include:

 Long-range phosphorus control plans similar to the "flow restoration plan" requirements for municipalities with stormwater-impaired waters. Municipal road management requirements will be incorporated into the MS4 permit; separate permit coverage will not be required.

Municipally Owned Developed Land Permit

What's required?

- All municipal sites with 3 or more acres of impervious surface, including municipal properties, will require a new developed land permit.
- If a site does not have a stormwater system designed to 2002 or more current standards, it will need to implement stormwater management practices.

- Implementation plans for stormwater best management practices (BMPs) to reduce phosphorus in conformance with the Champlain TMDL.
- Application fee: \$2,400; annual operating fee: \$10 per acre of impervious surface.

The reissuance process for the MS4 permit will start within 3 months of the issuance of the TMDL. Regulated MS4s will be notified and included in the stakeholder process.

- Smaller sites may be subject to the same requirement if necessary to implement the Lake Champlain TMDL, or stormwater TMDLs.
- Application fee: \$860 per acre of impervious surface; annual operating fee: \$160 per acre impervious surface.

The developed land general permit must go into effect before January 2018, with all projects in the Champlain basin under a permit by 2023, and the rest of the state under a permit by 2028.

NEW PROJECTS

New Municipal Projects Construction Standards

The permitting standards for new projects have not yet changed. However, by January 2016 DEC will report to legislature on the prospect of lowering the threshold for requiring a post-construction stormwater permit for new projects to ½-acre of impervious surface (it is currently 1 acre). **The Department will also be revising its**

Stormwater Manual and Stormwater Rules over the coming year. The Manual and Stormwater Rules revisions will both go through the formal APA rulemaking process and municipalities will be invited to participate in rulemaking meetings and public comment processes.

Timeline for Municipalities

	ACTIVITY	MUNICIPAL OBLIGATIONS	TIMELINE
WASTEWATER	Wastewater Treatment Facilities (WWTFs)	Reductions from currently permitted phosphorus loads at 25 of 59 facilities in the Lake Champlain Basin.	Vermont DEC will issue wastewater discharge permits incorporating the new phosphorus allocations according to the five-year tactical river basin planning schedule (2016-2020).
STORMWATER	Municipal Roads General Permit www.watershedmanagement.vt.gov/ stormwater/hm/sw_municipalroads.htm	Implementation of practices to reduce erosion and stormwater discharged generated from roads and drainage systems.	The general permit must go into effect before January 2018, with all municipalities signed up no later than 2021.
	Municipal Separate Storm Sewer System (MS4) Permit	MS4 municipalities will develop long-range phosphorus control plans following the reissuance of this permit.	The reissuance process for the MS4 permit will commence within 3 months of the issuance of the TMDL.
	Stormwater Permits for Municipally Owned Developed Land	VT DEC's Stormwater Program will develop a general permit applicable to all sites with 3 or more acres of impervious surface, including municipal properties.	The general permit must go into effect before January 2018, with all projects in the Champlain basin under a permit by 2023, and the rest of the state under a permit by 2028.
NEW PROJECTS	Stormwater Permits for New Municipal Projects	No change. Report to Legislature by January 15, 2016 on whether to lower the threshold for new projects from 1 acre to ½-acre of impervious surface.	
	Stormwater Planning www.watershedmanagement.vt.gov/ erp/docs/erp_SWMPFinal2-18-14.pdf	No change. Towns are encouraged to seek funding for stormwater planning, which can be used in tactical basin plans.	

Providing Time, Flexibility and Support to Meet Requirements of the TMDL



For more information, contact:

Kari Dolan, Watershed Management Division One National Life Drive, Davis Bldg, 2nd floor, Montpelier, VT 05620-3522 (802) 490-6113