

# Water Quality Remediation, Implementation and Funding Report

Part I: Clean Water Needs, Financial Tools, and Administration

Part II: Lake Shoreland Protection and Restoration Management Options

January 14, 2013



Prepared in Accordance  
with Act 138 (2012),  
Section 19

Kari Dolan, Ecosystem  
Restoration Program

January 22, 2013

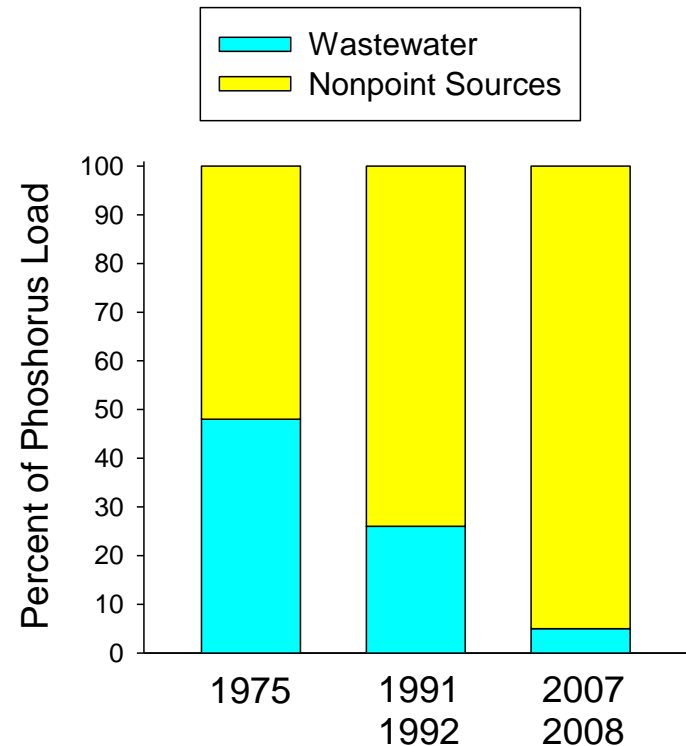
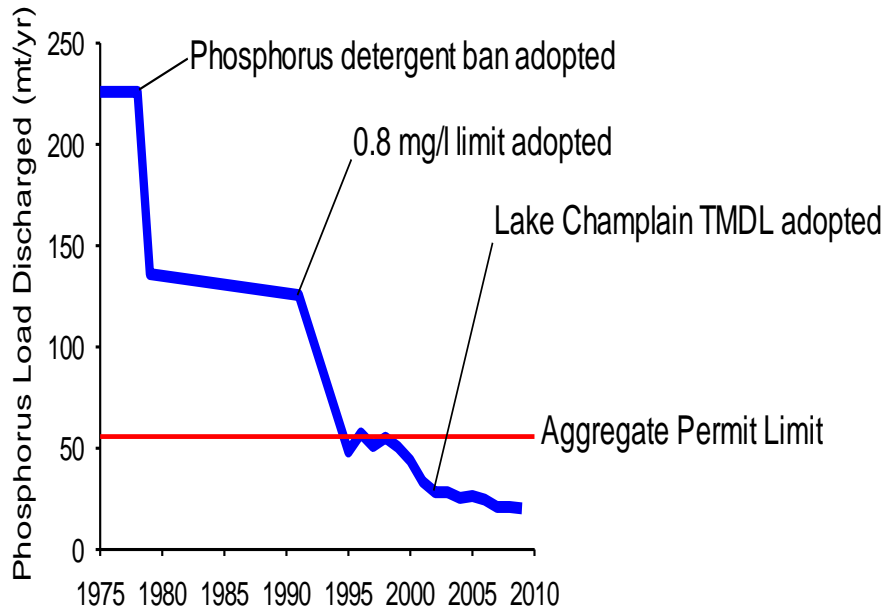


DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared for the Vermont General Assembly in  
Accordance with Act 138 (2012), Section 119

*The State and federal government undertook a shared responsibility to provide Vermonters with clean water, investing over \$600 million for wastewater treatment. That investment continues to pay substantial dividends to public health and safety, local economies, and the environment....* -- excerpt from the Act 138 Report, Executive Summary

### Long-term trends in Vermont wastewater phosphorus loads to Lake Champlain



*Our success in Vermont and elsewhere in restoring and preserving clean water for this and future generations will depend on four outcomes:*

- 1. Controlling nonpoint sources;*
- 2. Avoiding water quality degradation in the first place, which is often more cost-effective than restoring degraded waters;*
- 3. Continuing to provide wastewater treatment; and,*
- 4. Raising the public's conscience that clean water is vital to our public health and economy, worthy of a shared responsibility, and an absolute priority for public investment.*

# Functions/Values of Healthy Waters

- Flood mitigation
- Water supply
- Water quality
- Habitat
- Recreation
- Transportation
- Tourism

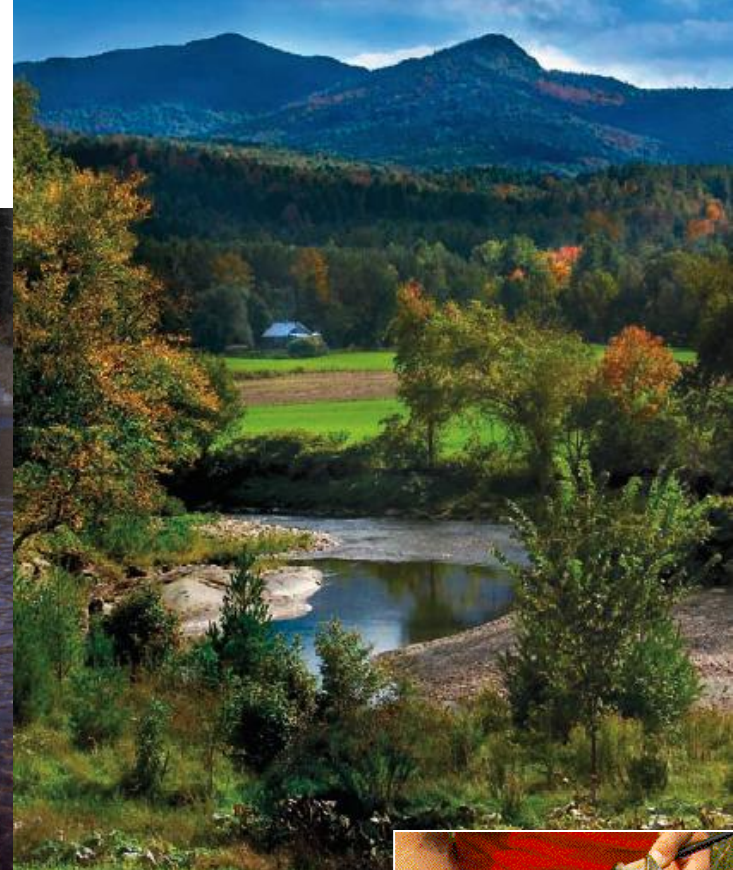




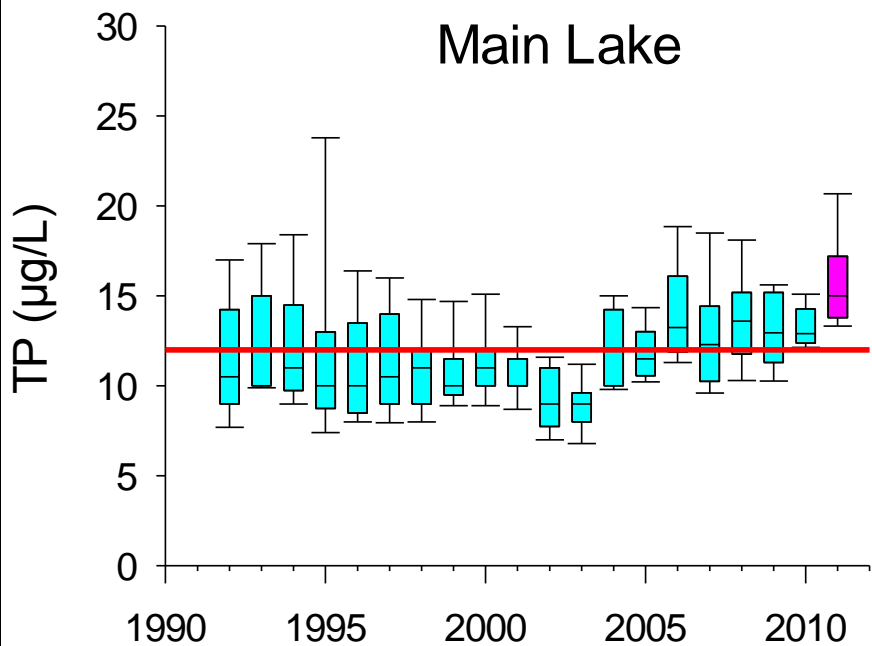
Photo: Brattleboro, VT, 2011, Courtesy of Caleb Clark, CNN



Brattleboro, 2011, photo: M. Reston



Wilmington, 2011, photo: J. Cantore



# Problem with Nutrient Pollution



# Problem with Sediment Pollution



04.29.2011 11:03

Plume from LaPlatte River





## **Consultation Meetings to Prepare The Vermont Statewide Water Quality Trust Fund Report, 2012**

Act 138 directs the Vermont Agency of Natural Resources (VANR) to prepare a Water Quality Remediation, Implementation, and Funding Report. The report will address four principal tasks:

- Task One: Identify priority needs for a statewide water quality restoration & preservation program; Estimate the costs to restore & preserve clean water;
- Task Two: Identify funding sources for water quality restoration & preservation projects;
- Task Three: Evaluate options for administering a statewide water quality trust fund.

# Schedule for the Development of the Act 138 Water Quality Trust Fund Report

TASK	DATE (2012)
<b>DEADLINE:</b> All public comments as input for the report and as part of the initial series of consultations with interested parties	Friday, November 9
DRAFT Act 138 Report Available for Public Comment	Friday, Dec. 14
<b>DEADLINE:</b> Public comments on the Draft Act 138 Report	Friday, Dec. 28
Final Report Submitted to the Vermont Legislature	Monday, January 14

**UPDATED Consultation Meetings to Prepare  
The Vermont Statewide Water Quality Trust Fund Report, 2012**

Agricultural Interests-General Meeting	Mid October	TBA
Non-Governmental Organizations-General Meeting	September 10; 5:00pm-7:00pm	Shelburne Town Office
Municipal Interests-General Meeting	September 11; 1:00pm-3:30pm	Chittenden County Regional Planning Commission
CCRPC/Regional Stormwater Education Program meeting	July 19, 10-1pm	Chittenden Country Regional Planning Commission
Lake Champlain Regional Chamber of Commerce/GBIC	July 18; 8:00am-9:00am	Lake Champlain Chamber of Commerce
Business Interests-General Meeting	September 18; 9:30am-12:00pm	Pavilion Building, 4 <sup>th</sup> Floor (need to register in advance with VANR and bring photo ID)
General Meeting – St. Johnsbury	October 9; 9:30am-11:30am	St. Johnsbury State Office Building, 1229 Portland Street, Ste. 201



# Water Quality Remediation, Implementation and Funding Report

## Part I:

### Chapter 1: State Clean Water Needs, Costs & Actions

### Chapter 2: Financial Tools for Clean Water

### Chapter 3: Options to Administer a Statewide Water Quality Trust Fund





# Water Quality Remediation, Implementation and Funding Report

## Part II:

### Lake Shoreland Protection and Restoration Management Options



## Part I, Chapter One: State Clean Water Needs, Costs, and Actions

Group #1: Municipal Operations for Nonpoint Source Pollution Reduction

Group #2: Agricultural & Forestry Operations for Nonpoint Source Reduction

Group #3: River, Floodplain, & Lake Shoreland Management

Group #4: Municipal Infrastructure and Regulated Stormwater Programs





## Group #1: Municipal Operations for Nonpoint Source Pollution Reduction

- Unregulated Stormwater
- Unregulated Stormwater Runoff from Road Networks



# What is Stormwater?



- Includes rainfall, snowmelt
- Involves impervious or compacted surfaces and the creation of runoff
- Rate and volume of water movement altered from pre-development condition



# Why is stormwater a problem?

- Pollutants mobilized in runoff:
  - Sediment
  - Nutrients
  - Pathogens
    - animal waste
    - overflows from combined sewer systems
  - Metals and hydrocarbons
    - wash-off of air pollution particulates
  - Debris
- Flow alterations
  - changes in perviousness --> changes in hydrology
- Habitat alterations (macroinvertebrates and fish)
  - siltation/sedimentation change river and lake bottom types



# Unmanaged stormwater runoff from Road Networks



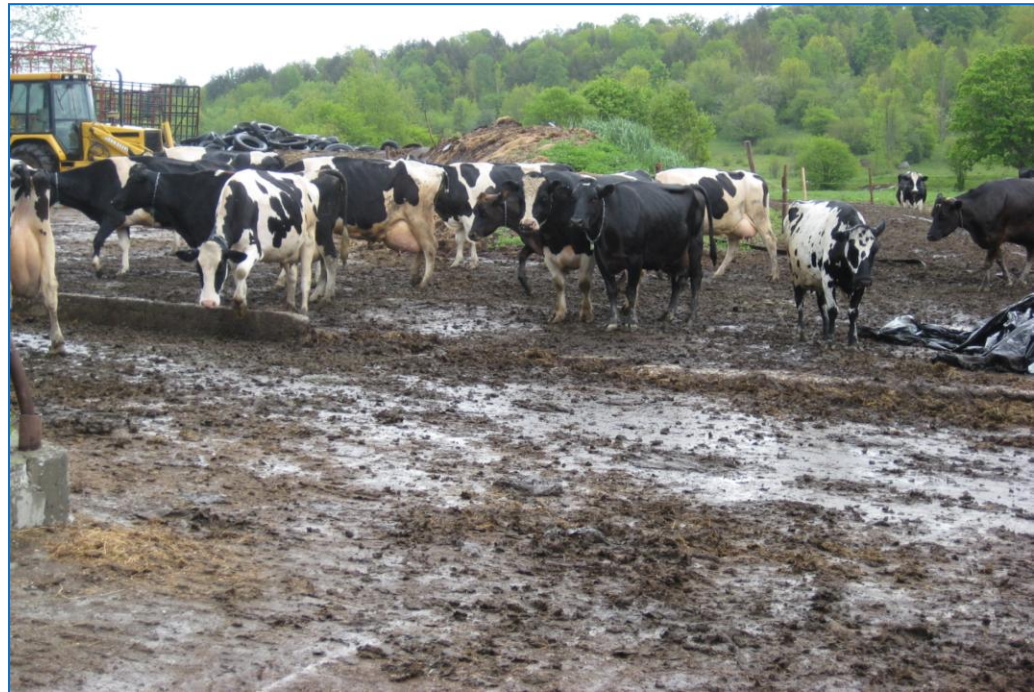


## Group #2: Agricultural & Forestry Operations for Nonpoint Source Reduction

- Farm Compliance with AAPs
- Agricultural Nutrient Management
- Agricultural Livestock Exclusion from Streams
- Technical Assistance for Agricultural Water Quality Improvement
- Agricultural Best Management Practice Implementation
- Management of Runoff from Timber Harvesting Operations



# Discharges from farmsteads & agricultural production areas



# Best Management Agricultural Practices



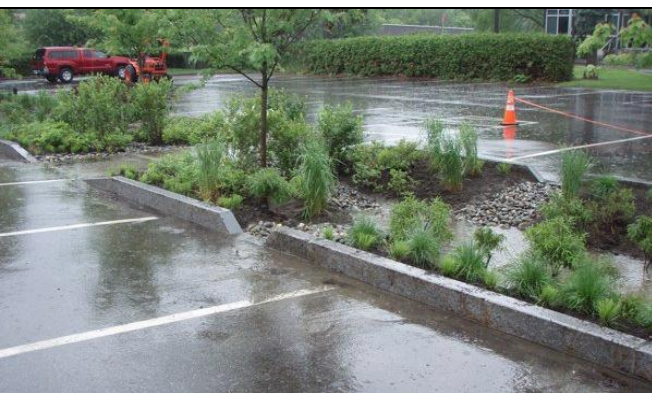
# Forestry Practices



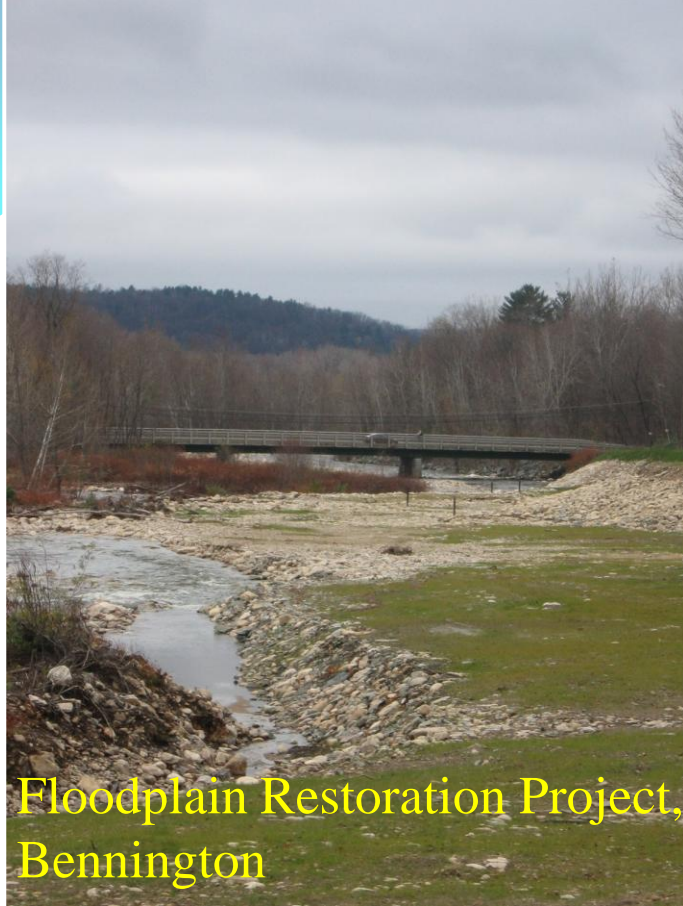


## Group #3: River, Floodplain, & Lake Shoreland Management

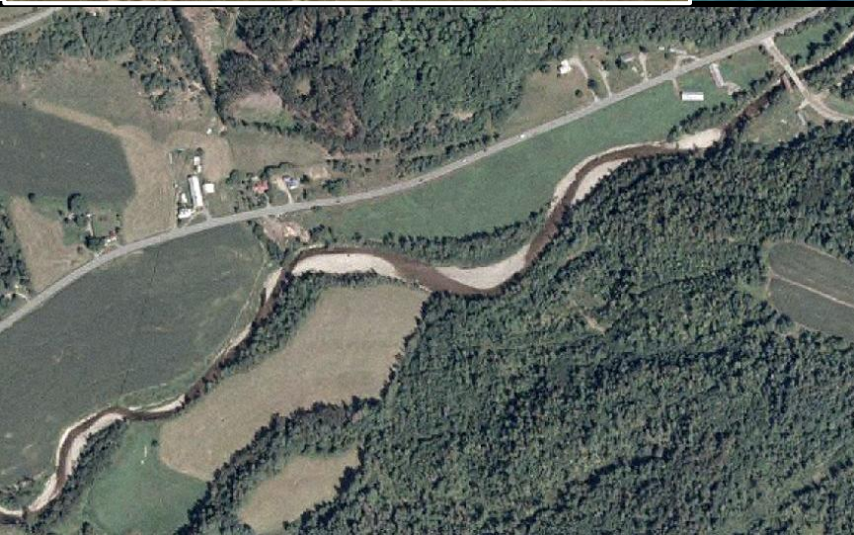
- River Corridor & Floodplain Management
- River Channel Management
- Lake Shorelands Protection



# Conduct Stream and Floodplain Management for Natural Stability



Floodplain Restoration Project,  
Bennington







## Lake Shoreland Protection and Restoration Management Options





## Group #4: Municipal Infrastructure and Regulated Stormwater Programs

- Aging Municipal Wastewater Infrastructure
- Nutrient Pollution Controls at Municipal Wastewater Facilities
- Financial Planning for Infrastructure Management
- Drinking Water Infrastructure
- Municipal Stormwater Infrastructure Needs
- Replacement or Upgrade of Failing & Substandard Septic Systems
- Stormwater Impaired Waters
- Enhanced Stormwater Regulation
- Implementation of the MS4 General Permit Program



# Wastewater Systems in Vermont

- Number of treatment facilities = 73
- Number of pipe systems = 82
- Based on the 2008 EPA Clean Watersheds Needs Survey, the 20-year projection of capital needs for VT municipal wastewater systems = \$218 million
- Annual need = \$48 million
- 2012 State Clean Water State Revolving Fund will fund \$25 million in clean water infrastructure or 52% of the state need



# Public Water Systems in Vermont

- Public water systems in Vermont = 1,367
- Total population served = 582,693
- Improvements needed to meet state and federal drinking water standards
- Based on the 2007 National Drinking Water Needs Survey and Assessment, the 20-year projection of capital needs for VT public water systems = \$453 million
- Annual need = \$33 million



## 1.21. Summary of Costs of Achieving Clean Water in Vermont<sup>64</sup>

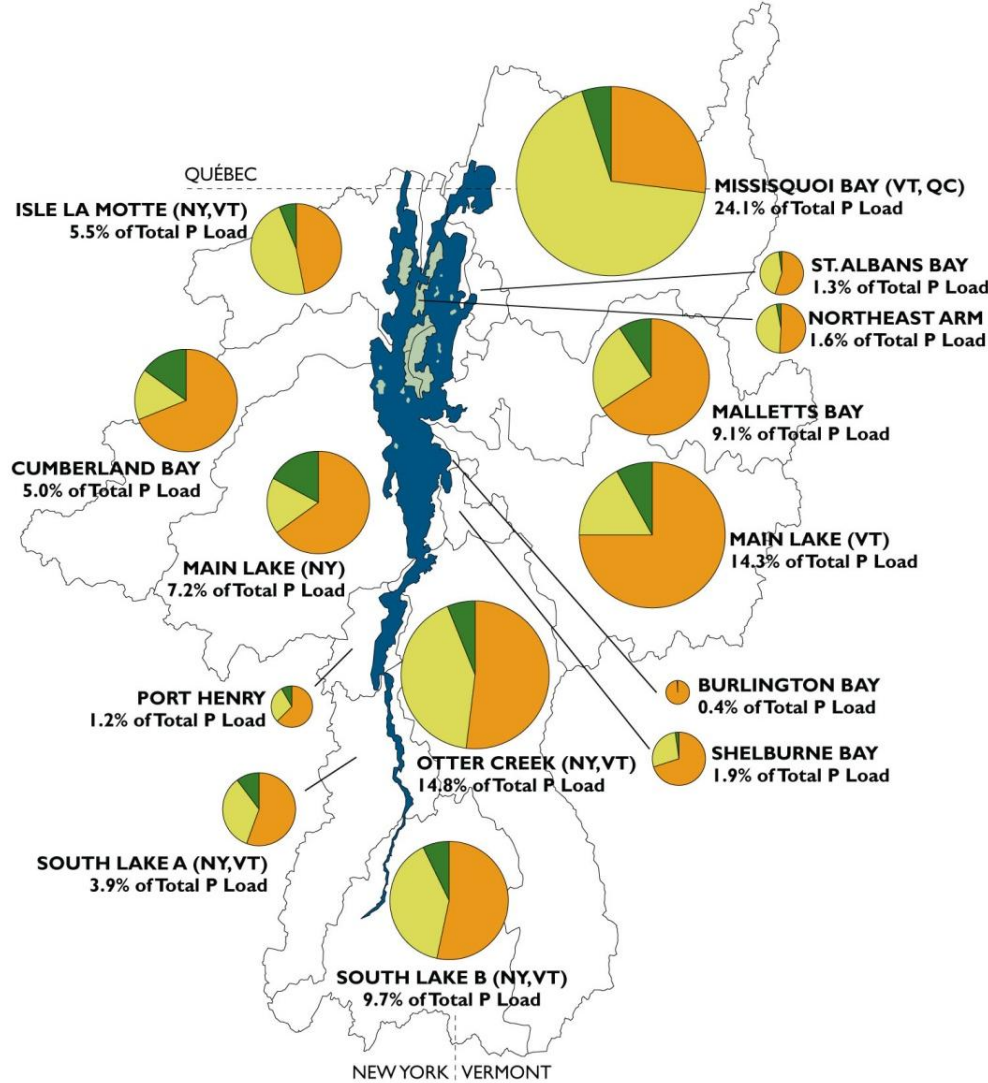
Item	Average Annual Cost Over Ten Years
<b>Group #1: Municipal Operations for Nonpoint Source Pollution Reduction<sup>65</sup></b>	
1.1 Unregulated Stormwater	\$70,854,000
1.2 Unregulated Stormwater Runoff from Road Networks	\$10,450,000
Subtotal	<u>\$81,304,000</u>
<b>Group #2: Agricultural and Forestry Operations for Nonpoint Source Reduction<sup>65</sup></b>	
1.3 Farm Compliance with the Accepted Agricultural Practice Rules	\$635,000
1.4 Agricultural Nutrient Management	\$700,000
1.5 Agricultural Livestock Exclusion from Streams	\$3,300,000
1.6 Technical Assistance and Education for Agriculture	\$652,500
1.7 Agricultural Best Management Practice Implementation	\$3,290,000
1.8 Management of Runoff from Timber Harvesting Operations	\$150,000
Subtotal	<u>\$8,727,500</u>
<b>Group #3: River, Floodplain, and Lake Shoreland Management<sup>65</sup></b>	
1.9 River Corridor Floodplain Management	\$1,440,000
1.10 River Channel Management	\$152,500
1.11 Lake Shorelands Protection	\$175,000
Subtotal	<u>\$1,767,500</u>
<b>Group #4: Municipal Infrastructure and Regulated Stormwater Programs<sup>66</sup></b>	
1.12 Aging Municipal Wastewater Infrastructure	\$18,000,000
1.13 Nutrient Pollution Controls at Municipal Wastewater Facilities	\$11,300,000
1.14 Financial Planning for Municipal Infrastructure Management	\$160,000
1.15 Municipal Drinking Water Infrastructure	\$21,500,000
1.16 Municipal Stormwater Infrastructure Needs	Unknown
1.17 Replacement or Upgrade of Failing and Substandard Septic Systems	Unknown
1.18 Stormwater Impaired Waters	\$10,000,000
1.19 Enhanced Stormwater Regulations	\$1,300,000
1.20 Implementation of the MS4 General Permit Programs	\$1,600,000
Subtotal	<u>\$63,860,000</u>
<b>TOTAL</b>	<b>\$155,659,000</b>



Total Annual Need is estimated at \$156 million

- Substantial but should not justify inaction;
- Validates the Legislature's concern about the State's current capacity to meet the public's demand for clean water;
- Requires a Shared Responsibility to be part of the solution to a problem to which we are all contributing

# Estimated Nonpoint Source Phosphorus Loading by Land Use and by Watershed



- Urban land areas are the largest source in the Basin, although the proportion varies among subwatersheds;
- Agricultural sources still highest contributor in the Missisquoi Bay watershed in Vermont;
- Land conversion from agricultural and forest lands to developed uses increases phosphorus levels in Lake Champlain.

## LAND USE TYPES

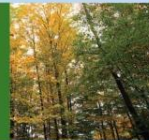
**DEVELOPED**  
All roads, cities, suburbs, lawns and large-lot buildings.



**AGRICULTURE**  
Crop and livestock production.



**FORESTED**  
Areas covered primarily with trees.



NOTE: The land use data is from 2001 satellite imagery—the most recent comprehensive and complete data for this region.  
 DATA SOURCE: Updating the Lake Champlain Basin Land Use Data to Improve Prediction of Phosphorus Loading. LCBP Technical Report #54. May 2007. Page 45, Table 2-11.  
 GRAPHIC FROM: State of the Lake and Ecosystem Indicators Report - 2008. Lake Champlain Basin Program, June 2008.

Troy et al., 2007.

**Table 1. Relative magnitude of categories of nonpoint source nutrient loading from Vermont watersheds (as percent of total nonpoint load). P = phosphorus; N = nitrogen; Not Assessed (NA) indicates that in-channel sources (e.g., streambank erosion) were not assessed directly but were implicitly included within the other land use categories; Not Significant (NS) indicates that forest land was not a significant variable in the model used for these estimates.**

Watershed	Nutrient	Agricultural Land	Developed Land	Forest Land	River Channel Processes
Lake Champlain Basin, VT, NY, QC <sup>70</sup>	P	39%	53%	8%	NA
Lake Champlain Basin, VT, NY, QC <sup>71</sup>	P	55%	37%	8%	NA
Missisquoi Bay, VT, QC <sup>72</sup>	P	38%	4%	18%	40%
St. Albans Bay, VT <sup>73</sup>	P	78%	16%	5%	NA
Lake Memphremagog <sup>68</sup>	P	46%	15%	39%	NA
Connecticut River, VT <sup>69</sup>	N <sup>74</sup>	23%	4%	NS	NA

<sup>70</sup> Troy, A., et al. 2007. Updating the Lake Champlain Basin land use data to improve prediction of phosphorus loading. Lake Champlain Basin Program Technical Report No. 54. Grand Isle, VT. [http://www.lcbp.org/techreportPDF/54\\_LULC-Phosphorus\\_2007.pdf](http://www.lcbp.org/techreportPDF/54_LULC-Phosphorus_2007.pdf)

<sup>71</sup> Hegman, W. et al. 1999. Estimation of Lake Champlain basinwide nonpoint source phosphorus export. Lake Champlain Basin Program Technical Report No. 31. Grand Isle, VT. [http://www.lcbp.org/techreportPDF/31\\_NPS\\_phosphorus.pdf](http://www.lcbp.org/techreportPDF/31_NPS_phosphorus.pdf)

<sup>72</sup> Stone Environmental, Inc. 2011. Identification of critical source areas of phosphorus within the Vermont sector of the Missisquoi Bay Basin. Prep. for Lake Champlain Basin Program. Grand Isle, VT. [http://www.lcbp.org/techreportPDF/63\\_Missisquoi\\_CSA.pdf](http://www.lcbp.org/techreportPDF/63_Missisquoi_CSA.pdf)

<sup>73</sup> Gaddis, E.J.B. and Voinov, A. 2010. Spatially explicit modeling of land use specific phosphorus transport pathways to improve TMDL load estimates and implementation planning. *Water Resources Management*, 24: 1621-1644.

<sup>74</sup> Note that 65 % of the total nitrogen load to the Connecticut River from Vermont was attributed to atmospheric deposition and not assigned to specific land use categories.



**Table 2: Tools for Financing a Statewide Water Quality Trust Fund**

Financial Tool	Annual Revenue Potential	Reference in Appendix D
Statewide Stormwater Fees	An average stormwater fee of \$10 per parcel of real property will generate approximately \$3.4 million annually.	<a href="#">D.1.</a>
Municipal Property Tax	An additional 1-cent tax rate applied to the fair market value of taxable real property will generate \$8.0 million annually.	<a href="#">D.2.1.</a>
Surtax on Personal Income Tax Liability	A 1% surtax applied to personal income tax liability will generate approximately \$6.0 million annually.	<a href="#">D.2.2.</a>
Excise Tax on Motor Fuels	An additional 1-cent per gallon excise tax increase will generate approximately \$3.9 million annually.	<a href="#">D.3.1.</a>
Excise Tax on Fertilizers & Pesticides	A 1% excise tax on the sale of fertilizers and pesticides will generate approximately \$250,000 annually.	<a href="#">D.3.2.</a>
Excise Tax on Flushable Consumer Products	A 1% excise tax on the sale of flushable products will generate approximately \$1.3 million annually.	<a href="#">D.3.3.</a>
Excise Tax on Bottled Water Containers	A 1-cent per container excise tax on bottled water would raise roughly \$1 million annually.	<a href="#">D.3.4.</a>
Special License Plate Fee	A special license plate fee would generate a very small amount of revenue annually.	<a href="#">D.4.1.</a>
Non-Motorized Boat Fee	A non-motorized boat fee would generate a small amount of revenue annually.	<a href="#">D.4.2.</a>
Non-Resident Boat Docking Fee	A non-resident boat docking fee would generate a small amount of revenue annually.	<a href="#">D.4.3.</a>
Impact Fees	Impact fees would generate an uncertain amount of revenue annually since they are tied to new development.	<a href="#">D.4.4.</a>
Drinking Water Fee	Drinking water fees may generate moderate revenue depending on the scope of the program.	<a href="#">D.4.5.</a>
Special Assessments	Assessing the beneficiaries of certain public water quality projects would generate an uncertain amount of revenue annually.	<a href="#">D.5.1.</a>
Escheating Unclaimed Beverage Container Deposits	Escheating unclaimed beverage container deposits would generate approximately \$2 million annually.	<a href="#">D.5.2.</a>
Lottery Game	Expanding the player base of the state lottery would generate a small amount of revenue annually.	<a href="#">D.5.3.</a>
Increased Civil Penalties	Revenue potential is considered low, since civil penalties are intended to deter violations rather than raise revenue.	<a href="#">D.5.4.</a>

## Evaluation Criteria:

**Revenue Potential:** The revenue source has a base large enough to generate significant revenue with a reasonable tax rate or fee.

**Stability:** Revenues are relatively constant over time and not subject to unpredictable fluctuations.

**Sufficiency:** The revenue source provides the revenue growth necessary to finance the desired rate of spending growth.

**Administration and Compliance:** The degree to which the administrative apparatus necessary to collect revenue, enforce the law, and audit to ensure compliance and the burden of tax compliance on taxpayers is minimized.

**Accountability:** The degree to which the amount of the tax or fee is explicit and known to those who pay. This criterion provides for transparency in evaluating the set of financial tools.

**Political Viability:** The presumed level of public support or opposition to the tax or fee as a mechanism to improve water quality (which is necessarily subjective).

**Promotes Mitigation:** The degree to which a tax or fee encourages individuals and businesses to perform on-site mitigation to improve water quality.

**Geographic Distribution:** The degree to which the tax or fee applies uniformly across the entire state.

**Sensitivity Based on Income:** The degree to which the tax or fee is based on ability to pay.

**Relation to Water Resources:** The degree to which the tax or fee bears a relationship to water quality.

**Table 4: Evaluation of Financial Tools to Support a Clean Water Trust Fund**

Revenue Option	Revenue Stream Considerations			Administration & Implementation			Equity and Other Considerations			
	Revenue Potential	Stability	Sufficiency	Administration & Compliance	Accountability	Political Viability	Promotes Mitigation	Geographic Distribution	Income Equity	Relation to Water Quality
Statewide Stormwater Fees	High	High	Low	High	High	High	Yes	High	Low	High
Municipal Property Tax	High	High	High	Low	Low	Low	No	High	Moderate	Low
Surcharge on Personal Income Tax Liability	High	High	High	Low	High	Moderate	No	High	High	Low
Excise Tax on Motor Fuels	Moderate	Moderate	Low	Low	Moderate	Moderate	No	High	Low	High
Excise Tax on Fertilizer & Pesticides	Low	High	Low	High	Low	Low	Yes	Moderate	Low	High
Excise Tax on Flushable Consumer Products	Moderate	High	Moderate	High	Low	Moderate	No	High	Low	Moderate
Excise Tax on Bottled Water Containers	Moderate	High	Moderate	Moderate	Low	Moderate	No	High	Low	Low
Special License Plate Fee	Low	High	Low	Low	High	High	No	High	Moderate	Low
Non-Motorized Boat Fee	Low	High	Low	Low	High	Moderate	No	High	Moderate	High
Non-Resident Boat Docking Fee	Low	High	Low	Moderate	High	High	No	NA	Moderate	High
Impact Fees	Low	Low	Low	Moderate	High	Moderate	Yes	High	Moderate	High
Drinking Water Fee	Moderate	Moderate	Moderate	High	High	Moderate	No	High	Moderate	Moderate
Special Assessments	Low	Low	Low	High	High	Moderate	Yes	Low	Moderate	High
Escheating Unclaimed Beverage Container Deposits	Moderate	High	Low	Low	High	High	No	High	NA	High
Lottery Game	Low	High	Low	Low	High	High	No	High	Low	Low
Increased Penalties	Low	Low	Low	Moderate	High	High	Yes	High	NA	High


**Table 3: Tools to Enhance Effectiveness of Current Programs to Support Clean Water**

Existing Program	Possible Modification	Reference in Appendix D
Supplemental Environmental Projects (SEP)	Enhance the Use and Effectiveness of SEPs	<u>D.6.1.</u>
State Revolving Funds	Encourage the Development of Stormwater Projects Using SRF <sup>78</sup>	<u>D.6.2.</u>
Vermont State Municipal Bond Bank	Provide Municipalities with Low Interest Loans.	<u>D.6.3.</u>
US Department of Agriculture Rural Development Loans & Grants	Provide Loans and Grants for Municipal Wastewater and Drinking Water Projects	<u>D.6.5.</u>
Use Value Property Taxation	Improve Environmental Stewardship of the Program	<u>D.6.6.</u>
Conservation Easements and Other Conservation Tools	Achieve Greater Water Quality Protection Through Conservation	<u>D.6.7.</u>
Targeting Incentives to Support Compact Sustainable Growth	Integrate Water Quality Objectives with Sustainable Land Use Policies	<u>D.6.8.</u>

Table 5: Options for Administering the Statewide Water Quality Trust Fund

<b>Option Category</b>	<b>Possible Entity to Administer Program</b>
State Government Agency	State Government Option #1: Vermont Department of Environmental Conservation
	State Government Option #2: State or Regional Stormwater Utility
Quasi-Judicial Public Agency	Vermont Natural Resources Board
Quasi-Governmental Funding Agency	Funding Agency Option #1: Vermont Housing and Conservation Board;
	Funding Agency Option #2: Vermont Economic Development Authority
Non-Governmental, Publicly supported, Organization	Vermont Community Foundation
Private, Non-Profit Organization	The Efficiency Vermont Model
New Institution	New Institution for Managing Runoff

Federal Clean Water Funding - Vermont	Approved FFY 2009	Approved FFY 2010	Approved FFY 2011	Approved FFY 2012	Anticipated FFY 2013
US Environmental Protection Agency					
Clean Water Act §319 Grant Program (Nonpoint Source) - Total Pass Through	\$460,634	\$460,634	\$460,634	\$196,240	--
- Agriculture	\$207,285	\$207,285	\$207,285	\$196,240	--
-NPS Pollution Control-Non Agriculture	\$253,349	\$253,349	\$253,349	--	--
Clean Water Act §604(b) Water Quality Planning Grants	\$40,000	\$40,000	\$40,000	\$40,000	--
Lake Champlain Basin Program					
To VDEC (USEPA funds)	\$487,950	\$793,200	\$399,116	\$240,750	--
To VDEC (Great Lakes Fishery Commission)		\$1,840,000	\$595,000	\$1,429,100	--
LCBP Implementation - P reduction projects		\$443,172	\$1,032,172	\$980,962	--
IJC M <del>issisquoi</del> Bay phosphorus reduction	\$300,000	--	--	--	--
Monitoring, Phosphorus loading from roads	\$100,000	--	--	\$41,000	--
Monitoring, M <del>issisquoi</del> Bay internal P model	\$125,000	--	--	--	--
Ecosystem indicators database	--	--	\$275,000	--	--
Monitoring, To UVM, Monitoring, Blue-Green Algal Toxin	\$85,000	\$120,000	\$120,000	\$70,000	--
Project Rock	--	\$250,000	--	--	--
Otter Creek IDDE	--	\$100,000	--	--	--
USDA Agriculture Research Service, BSTEM Model Phase II	--	\$100,000	--	--	--
U.S. Geological Survey					
L <del>i</del> DAR (USGS/VTDEC agreement; M <del>issisquoi</del> Phase II, Otter Creek, Phase I)	--	\$270,000	--	\$150,000	--
BMP effectiveness studies (USGS-LCBP)	\$145,000	\$117,536	\$52,000	--	--
Phosphorus trends analysis (USGS-LCBP)	\$40,000	\$50,000	\$93,000	--	--
Federal Highway Administration					
Better Back Roads, Federal Transportation Enhancement Funds	\$275,000	\$275,000	\$275,000	\$275,000	\$0
US Department of Agriculture, US Fish and Wildlife Service					
NRCS, Riparian Corridor and Wetland Protection and Restoration	\$1,600,000	\$1,750,639	\$482,000	\$1,181,858	--
Pittman-Robertson 3:1 match	\$90,000	--	--	--	--
NRCS Best Management Practices-EQIP	--	\$7,000,000	\$7,984,404	\$5,353,325	\$5,250,000
Nutrient Management Planning, EQIP LTPs (Land Treatment Plans)	--	\$140,000	\$49,000	\$85,000	\$85,000
Conservation Reserve Enhancement Program (CREP)	--	\$700,000	\$800,000	\$800,000	--
Conservation District Agricultural Resource Specialists	--	\$42,000	\$42,000	\$42,000	--
US Fish and Wildlife Service, Riparian, Wetland Protection and Restoration	\$60,000	\$320,000	--	--	--
FEMA, Map Modernization, Pre-Disaster Mitigation	\$540,000	\$200,000	--	--	--
<b>TOTAL (FY2013: funding is not yet available)</b>	<b>\$4,809,218</b>	<b>\$15,472,815</b>	<b>\$13,159,960</b>	<b>\$11,081,475</b>	<b>\$5,335,000</b>



*Managing nonpoint source nutrient pollution is challenging because most of these sources are not currently subject to State regulation.*

-- excerpt from Act 138 Report, Part I, Chapter 1

Education essential to achieve a shared responsibility to solve water quality problems

- Offer a Small Grants program
- Enhance youth and young adult summer work crew and leadership teams
- Support young adult stormwater outreach teams
- Support municipal stormwater public engagement programs
- Support a watershed academy
- Enhance availability of education and technical assistance to and farms



# Next Steps

Addressing the magnitude of need requires collaboration:

- Build support for clean water from municipalities, businesses, tourism industry, farmers, watershed organizations, civic organizations, general public
- Develop a process for establishing funding priorities
  - Focus on the significant sources
  - Rely on a strategic approach to target projects that will yield greatest long-term benefit
  - Target “hot spots” – those areas the pose a high risk of contributing nutrient and sediment-laden runoff
  - Avoid water quality degradation
  - Continue to provide wastewater treatment
- Find Reliable & long-term sources of funding
- Use state funds to leverage federal funds

# Contacts

A scenic view of a residential development. In the background, a row of white, two-story houses with dark roofs is situated on a slight rise. A river flows through the middle ground, surrounded by lush green trees and vegetation. The sky is blue with scattered white clouds.

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