



CHITTENDEN COUNTY RPC
Communities Planning Together

Clean Water Service Provider (CWSP)

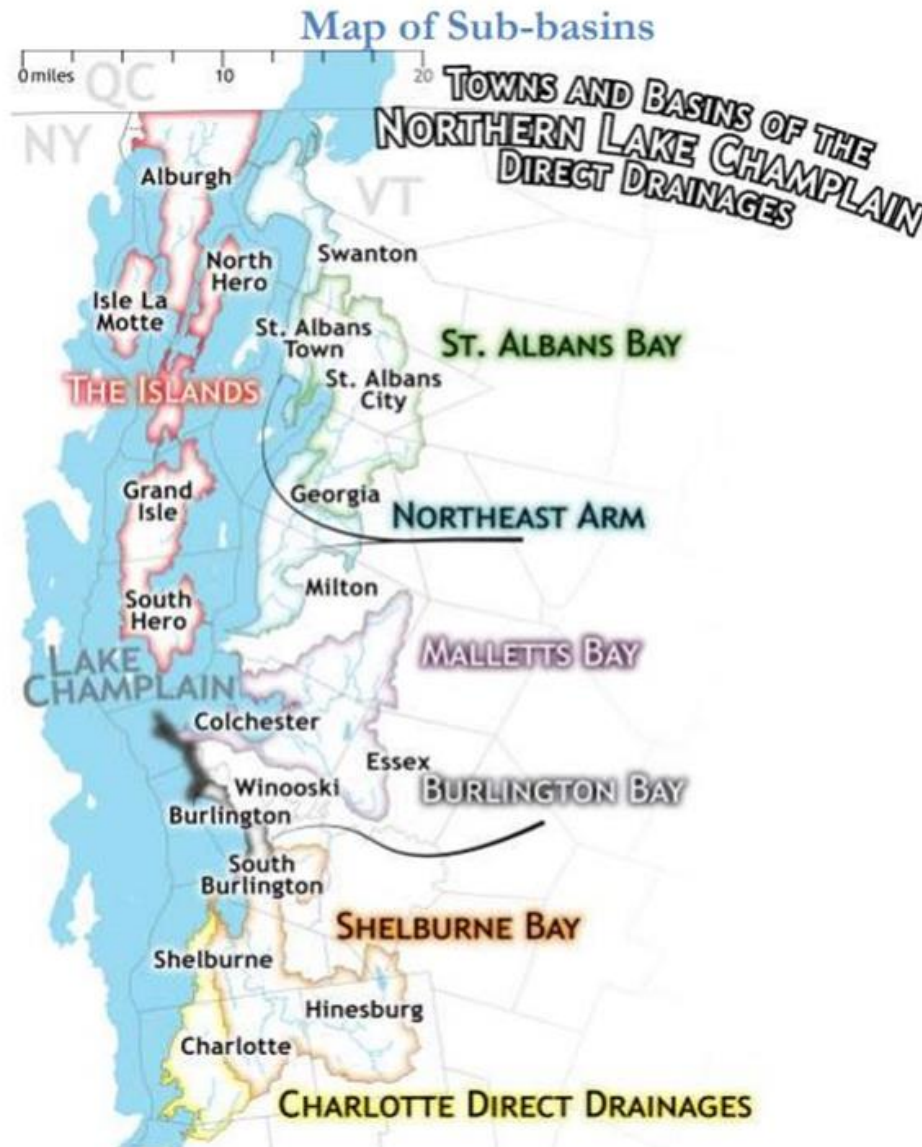
**Dan Albrecht, Chittenden County RPC
staff lead for CWSP for
Northern Lake Champlain Drainages
Basin (Basin 5)**

December 7, 2021

Overview

- Regulatory Origins
 - Act 76: Clean Water Service Delivery Act
 - Phosphorus load reduction targets
 - Role of Clean Water Service Provider
 - Formation of Basin Water Quality Council
-
- Note: A word of thanks to Dean Pierce of Northwest RPC for the template for this presentation and to VT-DEC for content

Northern Lake Champlain (Basin 5)



Source: VT-DEC

Regulatory origins

Vermont Clean Water Act (Act 64 of 2015) “All-in for Clean Water”

Reasonable assurance to
meet nonpoint source
targets



Water quality regulations

Clean Water Fund

Tracking, accounting, and
reporting requirements



TMDL = Total Maximum Daily Load

2016: EPA establishes TMDL for phosphorus for 12 Vermont segments of Lake Champlain

[Impaired Waters and TMDLs Home](#)

[Program Vision](#)

[Impaired Waters and TMDLs throughout the U.S](#)

[Technical Tools and Resources](#)

Lake Champlain Phosphorus TMDL: A Commitment to Clean Water



Excess phosphorus from a variety of sources has impaired the water quality of Lake Champlain. In 2002, Vermont prepared a plan to reduce phosphorus loadings by developing a Total Maximum Daily Load (TMDL). A TMDL places a cap on the maximum amount of phosphorus that is allowed to enter the Lake and still meet Vermont's water quality standards. EPA disapproved the Vermont 2002 Lake Champlain Phosphorus TMDL in 2011.

On June 17, 2016, EPA established new phosphorus TMDLs for the twelve Vermont segments of Lake Champlain. The TMDLs were developed in collaboration with the Vermont Agency of Natural Resources, Department of Environmental Conservation and the Vermont Agency of Agriculture, Food and Markets.

The phosphorus TMDLs for the Vermont Segments of Lake Champlain and supporting documents can be accessed at the links below. The supporting documents include appendices, a response to comments received on the proposed TMDLs, and a summary of changes from the proposed to final TMDLs.

Since TMDL issuance, EPA has been tracking the State of Vermont's progress toward TMDL implementation goals. EPA report cards and related correspondence between EPA and the State are provided below.

ACT 76 OF 2019

Clean Water Service Delivery Act (Act 76 of 2019/S. 96)

Long term clean water
funding source, updated
priorities

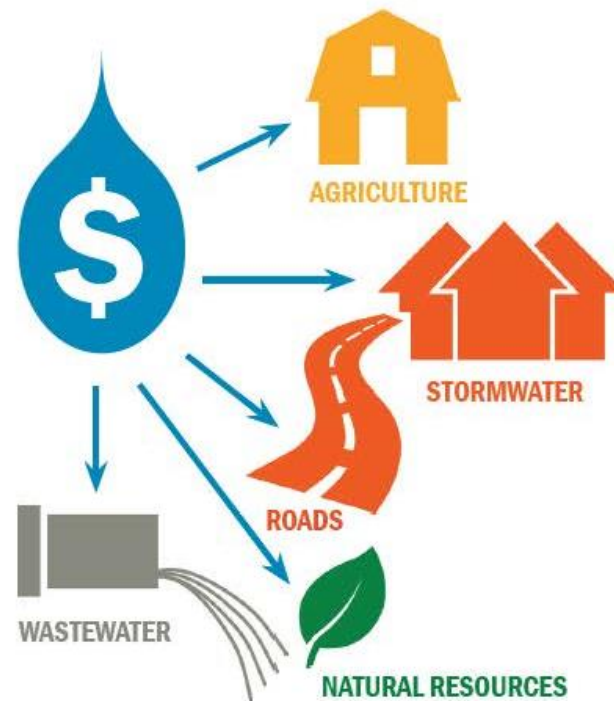
Four new grant programs

Clean water service
providers (CWSP)

Assurances to meet non-
regulatory targets

Assurances of project
operation and maintenance

Interim targets, enhanced
accounting



focus on non-regulatory phosphorus (P) load

- Provides assurance to meet non-regulatory, P load reduction targets
 - Floodplain reconnection, wetlands restoration, forestland best management practices and forested riparian buffer restoration
- Establishes interim P reduction targets
 - Disperses funds for Lake Champlain and Lake Memphramagog basins
 - Based on standard cost per unit per P reduced

Projected annual load reductions (DEC): **Draft**

Projected annual TP load reductions achieved through regulations per basin by sector

Regulatory

90% of reductions for AAFM/
NRCS regulatory and BMP
programs

Estimates are not currently
available

5% reduction for forest through
AMP's covers targets except
Basin 2/4 and 6

Stormwater regulatory reductions
from the MRGP, three acre permit,
TS4 and MS4 permits

Agriculture

Streams

Forests

Developed

Non-regulatory

10% of targets for CWSP for Non-
RAP farms/NR projects

100% of the Stream LA is currently
assigned to the CWSP

35% of the forest loading for B2/4
and 45% for B6 to the CWSP

The remaining developed lands
reduction targets after subtracting
loading from permit programs

First year targets (DEC): **Preliminary**

1) Preliminary year 1 CWSP reduction targets in kg/yr	Farm	Developed	Forest	Stream	Total
Basin 2 & 4 - Poultney, Mettawee, South Lake Champlain	14.8	7.6	6.6	36.6	65.6
Basin 3 - Otter, Lewis, Little Otter	21.3	13.1	9.7	53.2	97.3
Basin 5 - Northern Lake Champlain Direct	9.9	17.5	2.0	11.5	41.0
Basin 6 - Missisquoi, Rock, Pike	14.7	16.6	15.4	107.1	153.7
Basin 7 - Lamoille	4.8	15.8	4.2	17.0	41.8
Basin 8 - Winooski	6.1	15.8	9.5	63.6	95.1
Basin 17 Lake Memphremagog	10.0	13.6	4.7	18.9	47.3
Total	81.6	100.1	52.1	308.0	541.8

Source: VT-DEC

CWSP Funding Levels (DEC): Preliminary

3) Proposed CWSP phosphorus reduction targets and funding levels for FY23	Reduction targets (kg/yr)	Project funding	Admin funding	Total funding	Average cost per kg/yr
Basin 2 & 4 - Poultney, Mettawee, South Lake Champlain	64.1	\$640,999	\$113,118	\$754,117	\$11,496
Basin 3 - Otter, Lewis, Little Otter	95.1	\$975,028	\$172,064	\$1,147,092	\$11,789
Basin 5 - Northern Lake Champlain Direct	40.1	\$552,500	\$97,500	\$650,000	\$15,854
Basin 6 - Missisquoi, Rock, Pike	150.3	\$1,606,546	\$283,508	\$1,890,054	\$12,297
Basin 7 - Lamoille	40.9	\$552,500	\$97,500	\$650,000	\$15,550
Basin 8 - Winooski	92.9	\$1,069,927	\$188,811	\$1,258,737	\$13,236
Basin 17 - Lake Memphremagog	46.2	\$552,500	\$97,500	\$650,000	\$13,742
Total	529.6	\$5,950,000	\$1,050,000	\$7,000,000	\$12,920

Source: VT-DEC

Cost of phosphorus (P) load reduction varies

Non-regulatory Target Sector	Project categories representing cost of implementing non-regulatory targets by <u>most commonly associated sector</u>	Estimated design/engineering (if applicable) and construction cost per total phosphorus load reduction (\$/kg/yr)	Anticipated enhancements to targets/cost rates in future years
Streams	Floodplain/stream restoration	\$17,166	Functioning Floodplain Initiative (FFI) planning tools under development will further define restoration potential by project type, including anticipated split between forms of active and passive restoration.
	River corridor easement	\$13,970	
	Riparian buffer restoration	\$5,116	
	Lake shoreline restoration	\$7,824	
	Streams sector average	\$11,019	
Developed	Stormwater best management practices (BMPs)	\$46,026	
	Road BMPs	\$6,308	
	Lake shoreland runoff treatment	\$13,425	
	Developed sector average	\$21,920	
Farm Field	Riparian buffer restoration	\$5,116	
	Farm field sector average	\$5,116	
Forest	Forest road BMPs	\$1,578	Additional forest BMPs will be incorporated once phosphorus accounting methods are in place.
	Forest sector average	\$1,578	

Source: VT-DEC

Chittenden County RPC as CWSP for Basin 5

- **Clean Water Service Providers (CWSPs) Roles and Responsibilities**

CWSPs	ANR-DEC
Facilitate and staff basin water quality councils	Establish CWSP through rulemaking
Follow Water Quality Restoration Formula Grant guidelines	Participate on basin water quality councils
Identify, prioritize, develop, and implement non-regulatory projects to meet target	Establish Water Quality Restoration Formula Grant guidelines
Develop partnerships and subcontract/subgrant work	Establish interim (5-year) non-regulatory targets for CWSPs
Operate and maintain non-regulatory projects	Establish standard cost per unit phosphorus reduction
Report progress to DEC	Support Clean Water Board's dispersal of funds to CWSPs
	Provide technical assistance to CWSPs
	Oversee and determine CWSPs' satisfactory progress

CWSP start-up tasks: Phase I

- Develop a website/webpage
- Set up a grant/contract tracking system and grant reporting systems
- Set up a project tracking system
- Ensure legal and accounting requirements
Draft required CWSP policies
- Participate in Act 76 Advisory Group
- Manage startup grant Invoices, etc.

CWSP start-up tasks: Phase II

- Establish and empanel the BASIN WATER QUALITY COUNCIL (BWQC)
- BWQC capacity development and training
- Develop/adopt BWQC Meeting Rules / Policies
- BWQC member attendance at applicable meetings and trainings
- Conduct RFQs, procurement for select services

Basin Water Quality Council (9 members)

- 2 persons representing **natural resource conservation districts (NRCD)** in that basin
- 2 persons representing **regional planning commissions (RPC)** in that basin
- 2 persons representing **local watershed protection organizations** operating in that basin;
- 2 persons representing **municipalities** within the basin; and
- 1 representative from an applicable local or statewide **land conservation organization (LCO)**.

BWQC: Responsibilities

- A) The purpose of a BWQC is to establish policy and make decisions for the CWSP regarding the most significant water quality impairments that exist in the basin and prioritizing the clean water projects that will address those impairments based on the basin plan.
- (b) When prioritizing clean water projects and prioritizing the most significant water quality impairments in the basin, the BWQC shall consult with the basin plan and CWSP and utilize the Agency's project selection protocols.
- (c) The BWQC shall participate in the basin planning process established in 10 V.S.A. § 1253(d).

Selection of BWQC members

NRCs collectively decide which two districts serve

Watershed organizations decide collectively which two orgs. serve

Note: If no agreement, then CWSP shall select from eligible persons.

Land conservation organizations collectively decide 1 org to serve, in consultation with CWSP.

Municipal Representatives: CWSP solicits nominations from municipalities and identifies/announces representatives.

RPCs in Basin collectively decide which two RPCs serve.

Selection of BWQC: next steps by CWSP

NRCDs: will organize videoconference call with Winooski NRCD, Franklin County NRCD and Grand Isle NRCD in consultation with VT Assoc. of Conservation Districts

Watershed organizations: will organize video conference call of organizations in consultation with Watersheds United VT.

Land conservation organizations: will solicit interest from applicable organizations then organize videoconference call of same

Municipal Representatives: solicit nominations then announces representatives in consultation with municipalities

RPCs: Northwest RPC and Chittenden County RPC each nominate a representative

Final questions??

Dan Albrecht, CWSP Lead

Clean Water Service Provider: Northern Lake
Champlain Direct Drainages (Basin 5)

c/o Chittenden County RPC
110 West Canal St., Suite 202 Winooski,
VT 05404

- 802-861-0133
- dalbrecht@ccrpcvt.org