

Public Meeting on Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology

Date/Time: Tuesday, April 12, 2022, 12:00-1:30 pm

Location: Virtually via [Microsoft Teams Meeting](#) or in-person at Agency of Natural Resources, One National Life Drive, Montpelier, VT 05620-3510 in the Catamount Room (D215)

Vermont Department of Environmental Conservation (VTDEC)
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AGENCY OF ADMINISTRATION
AGENCY OF AGRICULTURE, FOOD & MARKETS
AGENCY OF COMMERCE & COMMUNITY DEVELOPMENT
AGENCY OF NATURAL RESOURCES
AGENCY OF TRANSPORTATION



Agenda

- Welcome, overview of agenda – 12:00-12:05 pm
- Overview of Clean Water Service Delivery Act (Act 76 of 2019) – 12:05-12:15 pm
- Overview of DRAFT Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology – 12:15-12:45 pm
- Overview of public notice and comment period (timeline and how to comment) – 12:45-12:50 pm
- Public comment – 12:50-1:30 pm

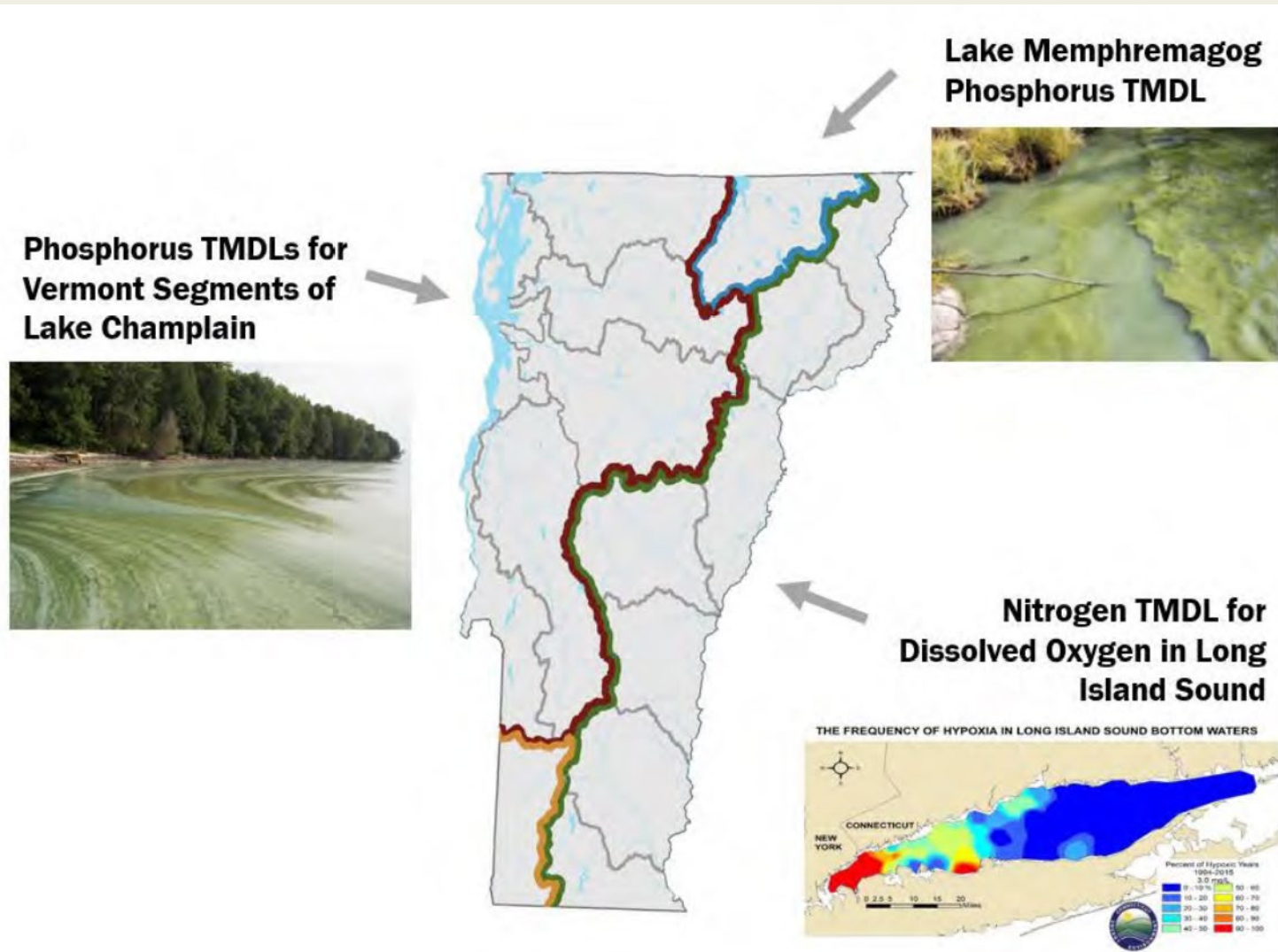
Meeting details and presentation slides posted at: <https://dec.vermont.gov/content/public-meeting-water-quality-restoration-formula-grant-targets-and-fund-allocation>

Overview of Clean Water Service Delivery Act (Act 76 of 2019)

Vermonters care about clean water



Vermont's Clean Water Priorities and Clean Water Restoration Plans (i.e., Total Maximum Daily Loads, or TMDLs)



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



Clean Water Service Delivery Act (Act 76 of 2019)

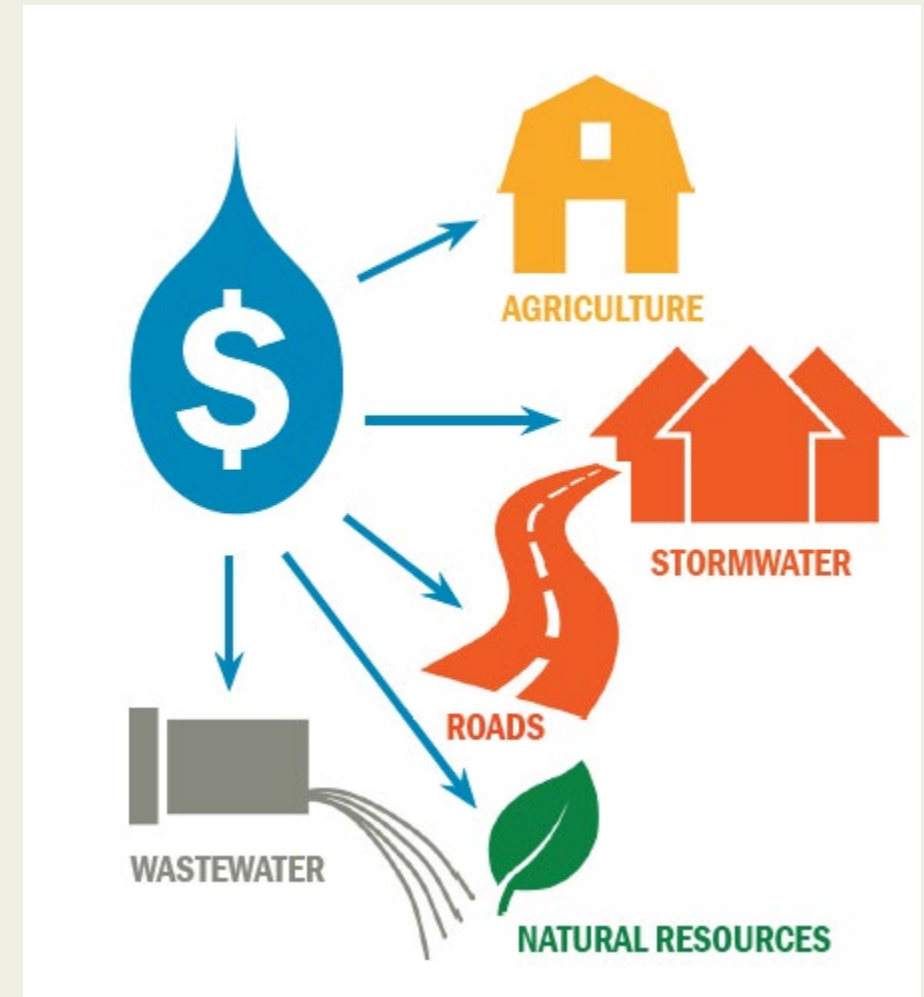
Long term clean water funding source, updated priorities

Four new grant programs, including Water Quality Restoration Formula Grants awarded to Clean Water Service Providers (CWSPs)

Assurances to meet non-regulatory targets

Assurances of project operation and maintenance

Interim targets, enhanced accounting

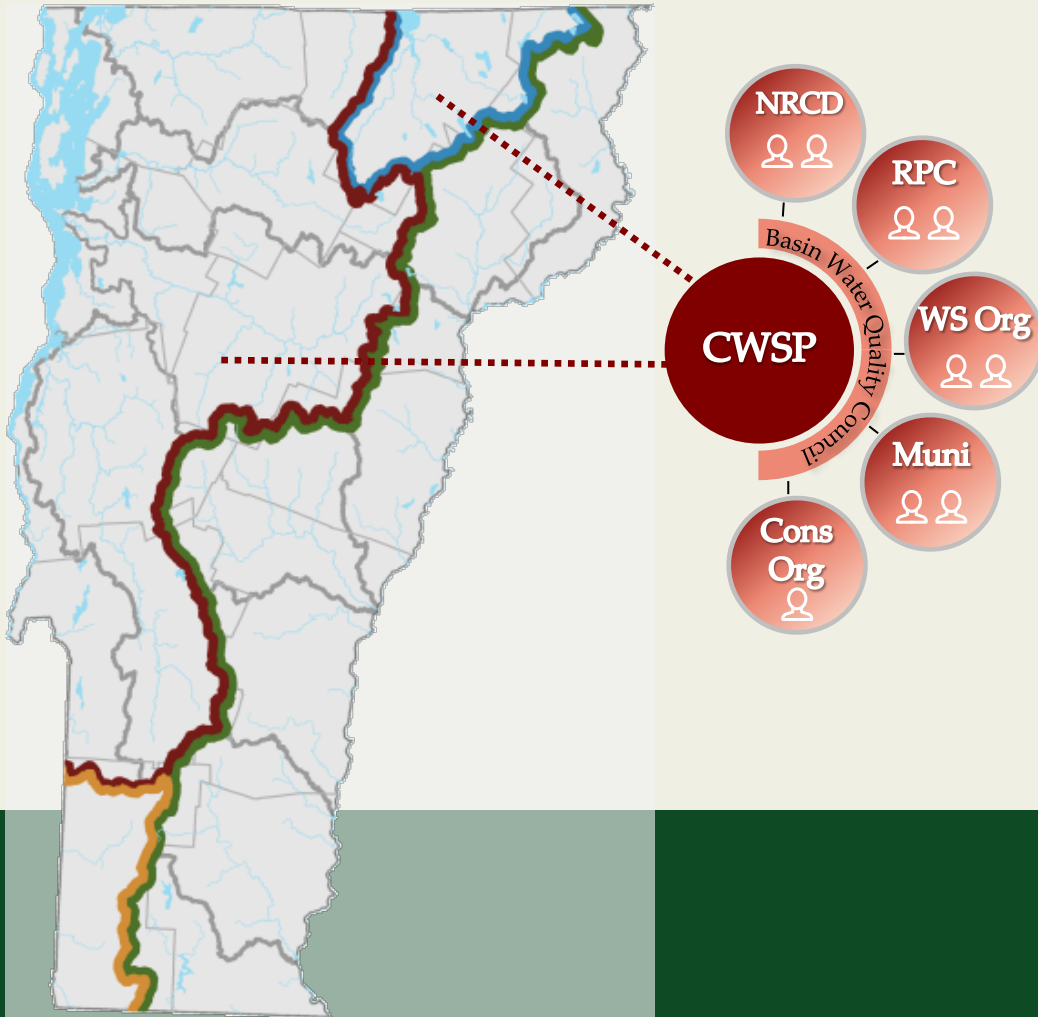


Water Quality Restoration Formula Grants

Recipient(s)	Clean Water Service Providers (CWSP) advised by Basin Water Quality Councils
Geographic Focus	Initially Lake Champlain and Lake Memphremagog basins by tactical basin planning watershed
Project Types	Non-regulatory clean water projects
Funding Level	Determined by Clean Water Board; administrative costs capped at 15% of total award
Fund Dispersal	Formula based on non-regulatory phosphorus reduction target and cost/unit phosphorus reduction
Effective Date	July 1, 2022 (State Fiscal Year 2023)

March 28-May 2, 2022 public comment period and April 12 public meeting on draft methods

Formula Grant Roles & Responsibilities



Clean Water Service Providers (CWSP)

- Receive and administer Formula Grants. Report Progress.
- With Basin Water Quality Councils, identify, develop, construct, verify, inspect, operate, and maintain clean water projects.

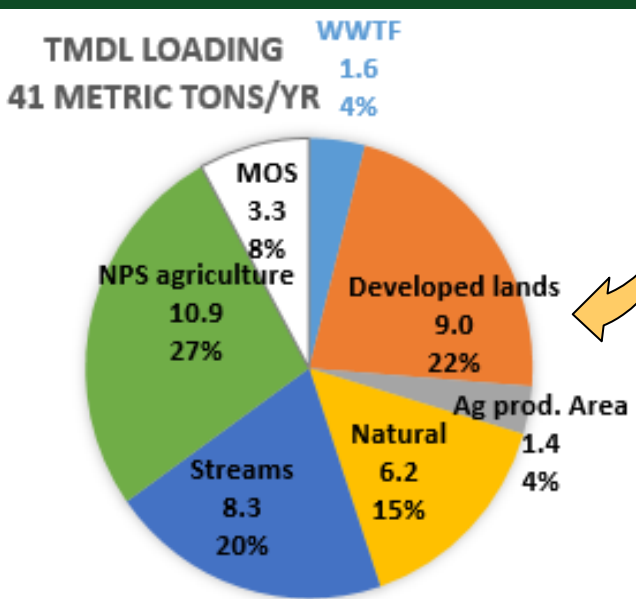
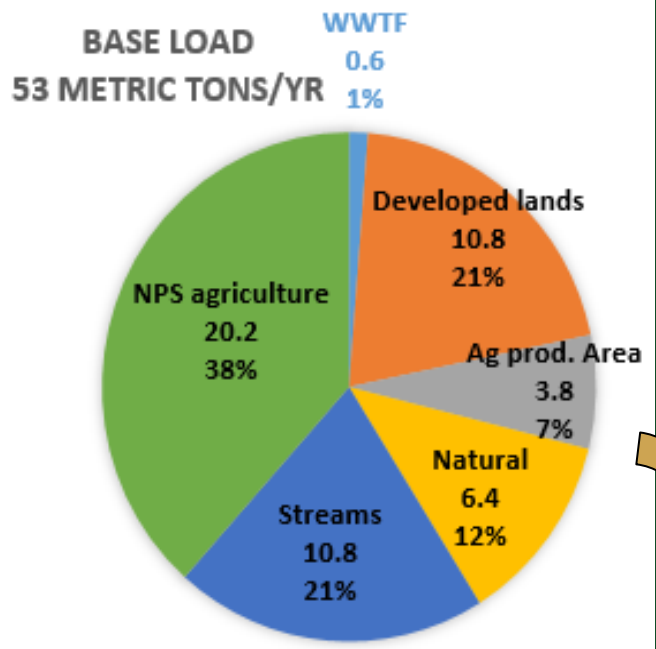
Basin Water Quality Councils (BWQC)

- Provide localized water quality knowledge to establish policy and make decisions for the CWSP regarding the most significant water quality impairments.
- Prioritize the projects.
- Participate in Tactical Basin Planning.

ANR-DEC

- Establish CWSP through rulemaking, Formula Grant guidelines and budget, oversee CWSP's satisfactory progress.
- Establish interim (5-year) non-regulatory targets for CWSPs
- Establish standard cost per unit phosphorus reduction
- Participate on BWQCs.
- Provide technical assistance and tools.

Overview of DRAFT Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology



The Lake Champlain and Lake Memphremagog Phosphorus TMDL's require reductions across agriculture, developed, WWTF, stream and forest lands to meet TMDL reduction targets



Agriculture

- Conservation practices that reduce sources of pollution from farm production areas and farm fields.



Developed Lands--Stormwater

- Practices that reduce or treat polluted stormwater runoff from developed lands, such as parking lots, sidewalks, and rooftops.



Developed Lands--Roads

- Stormwater and roadside erosion control practices that prevent erosion and treat road-related sources of pollution.



Wastewater

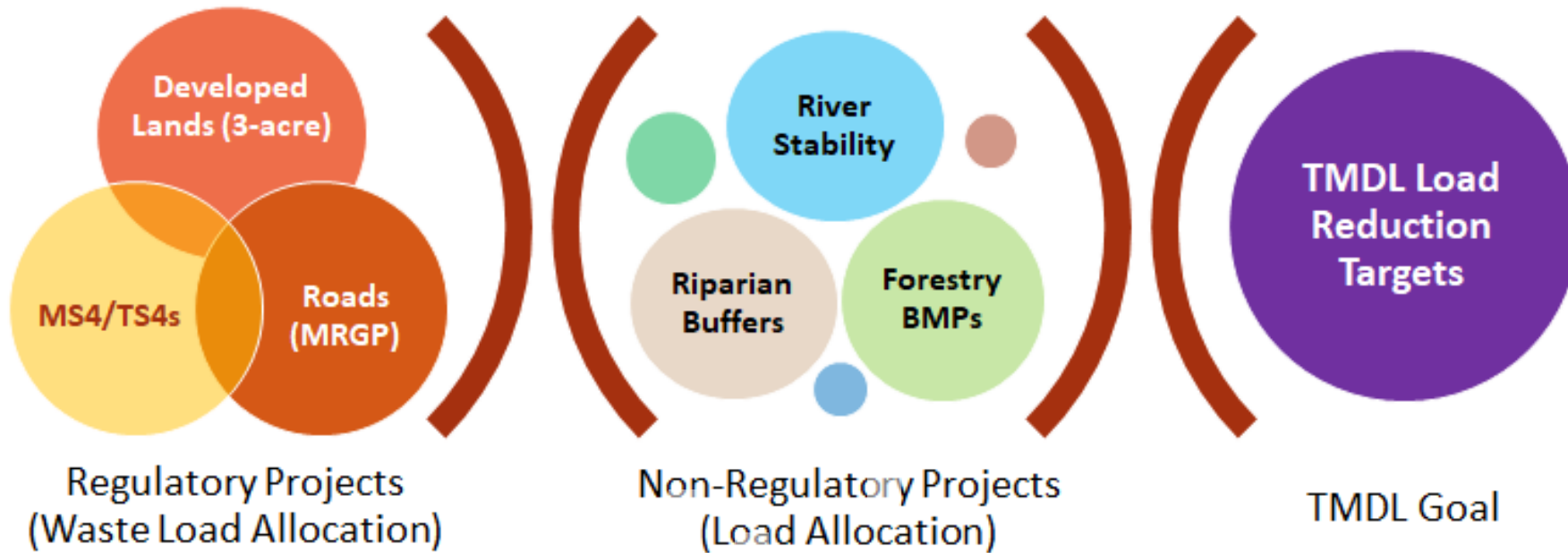
- Improvements to municipal wastewater infrastructure that decrease pollution from municipal wastewater systems through treatment upgrades, combined sewer overflow (CSO) abatement, and refurbishment of aging infrastructure.



Natural Resources

- Restoration of "natural infrastructure" functions that prevent and abate pollution. Natural infrastructure includes: floodplains, river channels, lakeshores, wetlands, and forest lands.

How will Vermont achieve the TMDLs?



TMDL targets will be met by implementing state regulatory programs plus non-regulatory projects funded through Clean Water Service providers

Clean Water Service Provider Targets

TMDL reductions - **Regulatory reductions** = CWSP target reductions

CWSP target reductions x **Sector costing rates** = Total dollars need per sector

Total dollar need x **Scaling to available budget and capacity** = Year-1 reduction targets and fund allocations

TMDL reductions - Regulatory reductions = CWSP target reductions

Regulatory

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

67% through implementation of River regulatory programs

100% Basins 3, 5, 7, 8, 17
12% basin 2/4 & 10% Basin 6

Stormwater regulatory reductions from the four permit programs



Agriculture



Streams



Forests



Developed



Non-regulatory

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

33% of targets are assigned to the CWSP

88% for Basin 2/4
90% for Basin 6

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

CWSP target reductions \times **Sector costing rates** = Total dollars need per sector

Sector cost rates

- Act 76 of 2019 requires establishment of standard cost per unit of phosphorus reduced (“cost rate”)
 - Includes costs of project identification, development, design, implementation, and operation and maintenance (O&M)
 - (O&M costs will be estimated in separate budget exercise)
- Cost rate, along with phosphorus targets, informs Formula Grant fund allocations

Cost Rate Methodology Steps

1. Identified project categories representative of non-regulatory work
2. Estimated cost per project output unit (e.g., acres impervious surface treated)
 - a. Design/engineering included if applicable
 - b. Operation and maintenance (O&M) not included in this budget exercise
3. Estimated total phosphorus load reduction per project output unit
4. Related cost per project output unit to estimated total phosphorus load reduction per project output unit
 - a. Design/engineering and construction costs front loaded
 - b. Total phosphorus load reductions expressed as annual average consistent with TMDL

Take a riparian buffer restoration for example:

Riparian buffer supports in stream stability = TMDL Streams LA

Riparian buffer land use conversion from pervious developed into forested = TMDL Developed WLA



Riparian buffer treats runoff from upland area = TMDL Developed WLA

Cost Rate Methodology Steps	Project Category Example
1. Identified project categories representative of non-regulatory work	Riparian buffer restoration
2. Estimated cost per project output unit (e.g., acres impervious surface treated) <ol style="list-style-type: none"> a. Design/engineering included if applicable b. Operation and maintenance (O&M) not included in this budget exercise 	Median cost of \$7,214 per acre of riparian buffer restored <ul style="list-style-type: none"> • Based on “River – Planting” project type • Completed SFY 2016-2020 in the CWRP (n=102) • Design/engineering not applicable; cost typically includes project scoping/development
3. Estimated total phosphorus load reduction per project output unit	1 acre restored estimated to treat: 0.72 kg/yr through treatment of runoff 0.24 kg/yr through land use conversion <u>0.45 kg/yr through improved stream stability</u> 1.41 kg/yr total phosphorus load reduction
4. Related cost per project output unit to estimated total phosphorus load reduction per project output unit <ol style="list-style-type: none"> a. Design/engineering and construction costs front loaded b. Total phosphorus load reductions expressed as annual average consistent with TMDL 	$\$7,214 \text{ per acre buffer restored} / 1.41 \text{ kg/yr total phosphorus load reduction per acre buffer restored} = \underline{\$5,116 \text{ per kg/yr total phosphorus load reduction}}$

Correlating Cost Rates by Project Category to Targets by Land Use Sectors

Table 3. Clean water project categories' estimated design/engineering (if applicable) and construction costs per total phosphorus load reduction (kg/yr) averaged to estimate "cost rate" per non-regulatory target land use sector.

Non-regulatory target land use sector	Clean water project categories representing costs of implementing non-regulatory targets	Estimated design/engineering (if applicable) and construction cost per total phosphorus load reduction (\$/kg/yr)
Streams*	Floodplain/stream restoration†	\$16,647
	River corridor easement	\$10,041
	Riparian buffer restoration‡	\$5,116
	STREAMS SECTOR AVERAGE COST RATE	\$10,601
Developed	Stormwater best management practices (BMPs)	\$46,026
	Non-regulatory road BMPs	\$3,153
	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	Lake shoreland runoff treatment	\$16,482
	DEVELOPED SECTOR AVERAGE COST RATE	\$15,822
Farm field††	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	FARM FIELD SECTOR AVERAGE COST RATE	\$6,725
Forest††	Non-regulatory forest road BMPs	\$15,245
	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	FOREST SECTOR AVERAGE COST RATE	\$9,565

Table 3 footnotes:

- Identified project categories that may contribute phosphorus reductions to targets by land use sector (based on land use treated)
- Design and implementation cost rates per land use sector calculated/estimated by averaging cost rates for applicable project categories
 - Propose simple average due to high-level estimates; can revisit weighting in future if appropriate
- Land use sector average cost rates are correlated with targets to allocate Formula Grant funds by watershed

Estimating Project Identification and Development Costs

- Project ID and development cost rate calculations are not tied to individual project outputs and phosphorus reductions
 - One project ID effort (e.g., stormwater master plan) may identify and prioritize dozens of project opportunities for further development
 - Not all projects ID'd will be considered high priority/cost-effective and may encounter barriers to implementation (e.g., landowner willingness)
- Cost rate methodology estimates project ID and development funding need through a percentage cost rate of total Formula Grant funds
 - Estimated 3% of total Formula Grant funds will be used for project ID based on % of state clean water funding awarded to project ID, SFY 2016-2021
 - Estimated 4% of total Formula Grant funds will be used for project development based on % of Clean Water Initiative Program-awarded dollars to project development, SFY 2021-2022 (new funding category in recent years)

CWSP target reductions \times **Sector costing rates** = Total dollars need per sector

The annual total phosphorus reduction targets for each sector for each basin were then multiplied by the sector costing rates.

Streams = Annual load reduction target (kg) \times \$10,601

Developed lands = Annual load reduction target (kg) \times \$15,822

Farm Fields = Annual load reduction target (kg) \times \$6,725

Forest lands = Annual load reduction target (kg) \times \$9,565

The annual funding needed exceeded the \$7,000,000 in Clean Water Funds available for Formula Grants.

Scaling to available budget

- \$7,000,000 budget for the Formula Grant to ramp-up capacity.
- Minimum funding level of \$650k set per basin.
- Scaling of reduction targets and funds based on available funds.

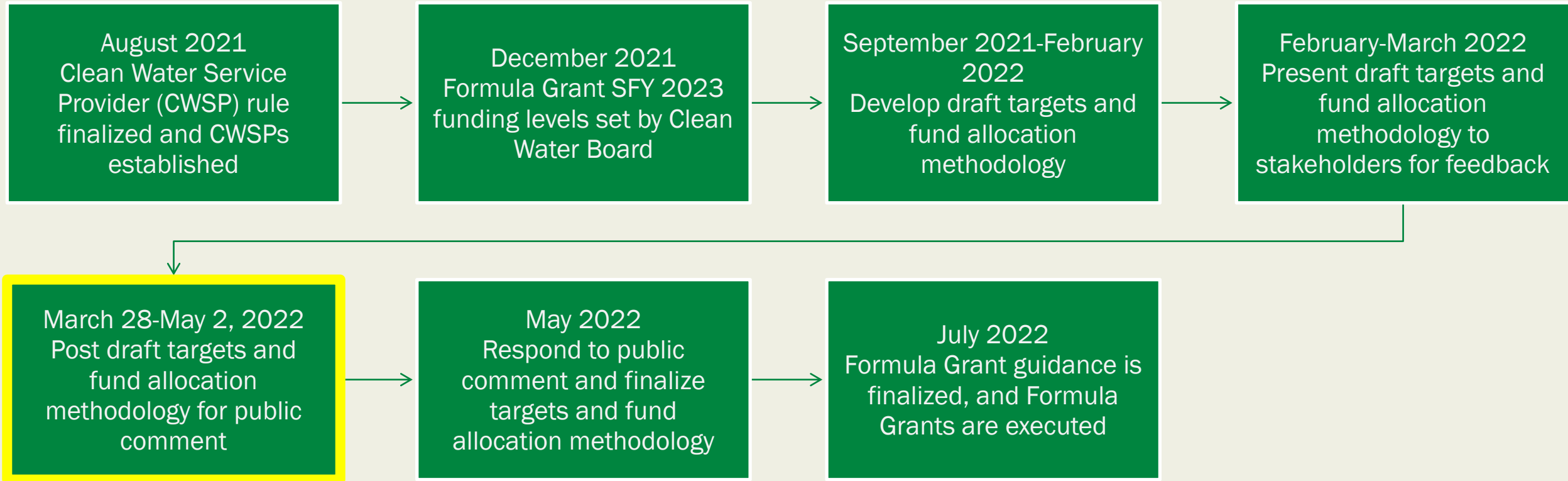


Draft CWSP targets and funding levels

Basin	Reduction target (kg)	Project funding (85%)	Admin funding (15%)	Total funding
Basin 2 & 4 - Poultney, Mettawee, South Lake Champlain	78.1	\$831,002	\$146,647	\$977,649
Basin 3 - Otter, Lewis, Little Otter	83.3	\$930,595	\$164,223	\$1,094,817
Basin 5 - Northern Lake Champlain Direct	41.9	\$548,539	\$96,801	\$645,340
Basin 6 - Missisquoi, Rock, Pike	145.3	\$1,657,731	\$292,541	\$1,950,272
Basin 7 - Lamoille	39.8	\$546,830	\$96,499	\$643,330
Basin 8 - Winooski	69.6	\$884,805	\$156,142	\$1,040,947
Lake Memphremagog	44.2	\$550,498	\$97,147	\$647,644
Total	502.2	\$5,950,000	\$1,050,000	\$7,000,000

Overview of Public Notice and Comment Period

Targets and Fund Allocation Methodology Drafting and Public Comment Process



How to Comment – Comments Due Monday, May 2, 2022

- Comments must be submitted through the [Environmental Notice Bulletin](https://enb.vermont.gov/Default) (ENB) (<https://enb.vermont.gov/Default>) due to statutory requirement to follow Type 3 procedures for public comment
- Search the ENB by selecting “Water Investment Division Clean Water Initiative” and select “Draft Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology”
- Instructions on how to use the ENB are available on the [Clean Water Service Delivery Act webpage Public Notice section](https://dec.vermont.gov/water-investment/statuses-rules-policies/act-76#publicnotice) (<https://dec.vermont.gov/water-investment/statuses-rules-policies/act-76#publicnotice>)

Search Results

Project/Activity Name ▲	Address	Town	Activity Type	Status	ENB ID	Permit #
DRAFT Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology			Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology	Draft Decision / Comment	PN22.0011787	Targets and Fund Allocation Methodology
Quantification of Pollution Reduction			Quantification of Pollution Reduction	Draft Decision / Comment	PN22.0012487	Phosphorous Quantification

Instructions for submitting comments using the ENB (REQUIRED):

The [Clean Water Service Delivery Act webpage Public Notice section](https://dec.vermont.gov/water-investment/statutes-rules-policies/act-76#publicnotice) (<https://dec.vermont.gov/water-investment/statutes-rules-policies/act-76#publicnotice>) includes the following details:

- ENB [Instructional Guide](#) and [FAQ sheet](#) to learn how to search ENB, create an account, submit comments, and more
- [DEC's ENB website](#) for more information about the Environmental Notice Bulletin
- Contact the ENB Administrator at ANR.ENBAdministrator@vermont.gov with "Act 76 of 2019 Public Comment" as the subject line *with technical questions on use of ENB*
- An account with ENB is not required to comment; *account is needed to attach documents* as part of a comment submission
 - Suggested submission templates to organize comments and attach to written comment submission through ENB
- Contact the Clean Water Initiative Program at ANR.CleanWaterVT@vermont.gov with "Act 76 of 2019 Public Comment" as the subject line *with general questions about the public comment process*

Reminder of Next Public Meeting

- Public Meeting on Phosphorus Tracking and Accounting Standard Operating Procedures - Friday, April 15th, 2022, 12:00-1:30 pm | [click here to visit the DEC calendar event for public meeting details and to RSVP](#)

Public Comment