Vermont Clean Water Initiative Program
State Fiscal Year 2021 Funding Policy

February 4, 2021

VERMONT CLEAN WATER INITIATIVE

VERMONT
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Vermont Clean Water Initiative Program (CWIP)
State Fiscal Year (SFY) 2021 Funding Policy

February 4, 2021

Approval

This Funding Policy is approved by the Department of Environmental Conservation (DEC) Commissioner for State Fiscal Year 2021 CWIP funding programs.

Peter Walke, DEC Commissioner

February 4, 2021

Funding Policy available electronically at: https://dec.vermont.gov/water-investment/cwi/grants

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Funding Policy Introduction

Vermont waterways provide access to safe drinking water, strengthen tourism, help to maintain property values, and support fishing, swimming, boating, and other recreational uses. Vermont's residents, visitors, and businesses care about clean water and benefit from continued investments in restoring and protecting our waters. The state and its federal and local partners are committed to restoring impacted waters, as well as protecting high-quality waters.

The Vermont Department of Environmental Conservation's (DEC) Clean Water Initiative Program (CWIP) coordinates with state agencies and with federal and local partners, representing all land use sectors, to fund, develop, implement, and track projects that improve water quality. CWIP implements its own funding programs and associated project tracking in addition to coordinating work across state government. Learn more at: https://dec.vermont.gov/water-investment/cwi.

This CWIP Funding Policy (Funding Policy) serves as a communication tool to clean water project proponents and prospective grant/contract recipients, outlining:

- State Fiscal Year (SFY) 2021 funds available and anticipated funding opportunities;
- DEC and external grantee/contractor roles and responsibilities related to funding programs; and
- Criteria to determine eligible uses of funds.

The Funding Policy applies to all clean water funding initiatives administered by the CWIP defined in the State Fiscal Year 2021 CWIP Spending Plan (see Appendix A).

Vermont Clean Water Initiative Background

WATER QUALITY GOALS

Vermont's waters are generally high quality. However, some suffer from excess pollution, which can lead to unhealthy conditions. Due to Vermont's rural characteristic, most water quality problems are caused by excess nutrient and sediment pollution, primarily transported from the landscape to waterways by rain-runoff and snowmelt, commonly referred to as "nonpoint source pollution." Nonpoint sources are harder to identify compared to point sources, which come from a single point, such as the end of a pipe.

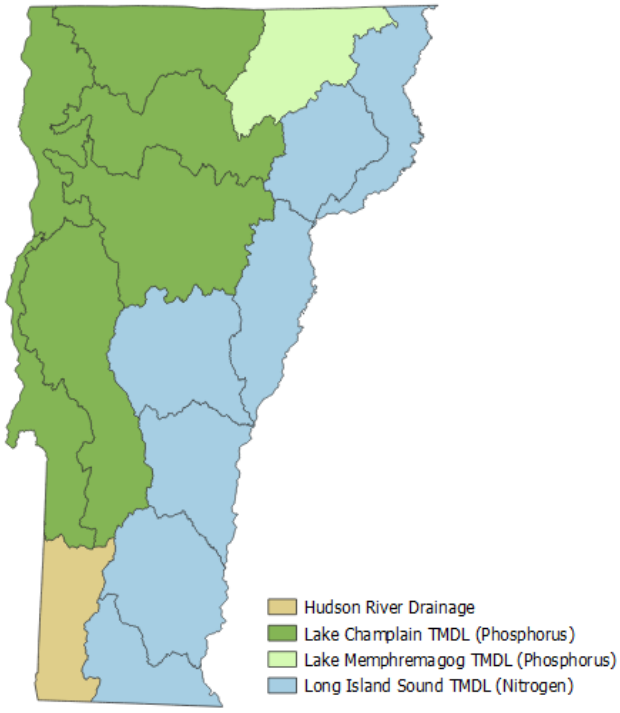


Figure 1. Vermont's large-scale TMDLs that require nutrient pollutant reductions (nutrients noted in legend)

Clean water restoration plans known as "Total Maximum Daily Loads" (TMDLs) identify pollutant reductions required for an impaired waterbody to meet the Vermont Water Quality Standards. TMDLs target both nonpoint source and point source (e.g., end-of-pipe) pollutant reductions. Tactical Basin Plans and Water Quality Restoration Plans identify the specific actions necessary to achieve pollutant reduction targets identified in TMDLs.

Figure 2. Cyanobacteria bloom in Lake Champlain

Most of the State of Vermont is covered by three large-scale TMDLs that require nutrient pollutant reductions (i.e., phosphorus and nitrogen) shown in Figure 1. Lake Champlain and Lake Memphremagog TMDLs target phosphorus pollution to address cyanobacteria blooms (i.e., blue-green algae), as well as excess algae and aquatic plant growth, as seen in Figure 2. The five-state Long Island Sound TMDL targets nitrogen pollution, which causes dead zones with low dissolved oxygen in the Sound.

Implementation of large-scale nutrient TMDLs also supports implementation of smaller scale TMDLS and local water quality priorities. For example, Lake Carmi, located in the Lake Champlain basin, also has a phosphorus TMDL and suffers from cyanobacteria blooms. Actions to reduce phosphorus pollution in Lake Carmi, as required by the Lake Carmi TMDL, also support implementation of the Lake Champlain TMDL.

ROLE OF CLEAN WATER PROJECTS

Clean water projects, described in Figure 3 below, target nutrient and sediment pollution across various land use sectors. Nutrient and sediment pollution reductions are required by TMDLs (described above) and may also be driven by the Vermont Clean Water Act (Act 64 of 2015) and the Combined Sewer Overflow (CSO) Rule.

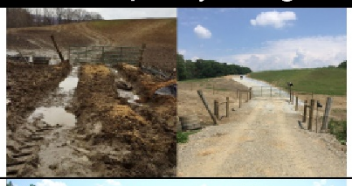
Land Use	Clean Water Project Objectives and Example Project Images	Additional Benefits
AGRICULTURE	Addresses runoff and soil erosion from farm production areas and farm fields. 	• Cost-effective • Leverages federal funds • Supports agricultural economy • Supports regulatory compliance
NATURAL RESOURCES	Restores functions of "natural infrastructure"—river channels, floodplains, lakeshores, and wetlands 	• Cost-effective • Leverages federal funds • Increases flood resilience • Improves habitat • Enhances recreation
STORMWATER	Addresses stormwater runoff from developed lands, such as parking lots, sidewalks, and rooftops 	• Increases flood resilience • May enhance aesthetic appeal • Supports regulatory compliance
ROADS	Addresses stormwater runoff and erosion from roads 	• Cost-effective • Leverages federal funds • Increases flood resilience • Reduces future road maintenance costs • Supports regulatory compliance
WASTEWATER	Decreases nutrients (phosphorus and nitrogen) through enhanced wastewater treatment and addresses aging infrastructure 	• Protects public health and safety • Leverages federal funds • Supports regulatory compliance

Figure 3. Clean water project land use sectors, objectives, and additional benefits

PRIORITIZATION OF FUNDS

The state must spend its resources efficiently and effectively, given the significant costs of restoring and safeguarding water quality. State agencies utilize DEC's Watershed Planning Program Tactical Basin Plans, where possible, to identify clean water projects that will provide the greatest water quality benefit. Tactical Basin Plans – written at the large river basin-scale (e.g., Winooski River Basin) – identify and prioritize projects across multiple sectors, including stormwater, rivers, roads, and wastewater treatment, based on scientific monitoring data and assessment results. Tactical Basin Plans prioritize clean water projects based on:

1. Expected environmental benefit and cost effectiveness, primarily based on nutrient and sediment pollution reduction, and secondarily based on other benefits such as flood resilience and habitat function.

2. Expected feasibility based on partner capacity and local support.

The prioritized lists of projects necessary to achieve clean water goals are found in each Tactical Basin Plan and continuously updated online in the Watershed Projects Database (WPD), available at: https://anrweb.vt.gov/DEC/cleanWaterDashboard/WPDSearch.aspx.

Community and stakeholder engagement is a key component of Tactical Basin Plan development and implementation. Local, regional, and statewide partners, including municipalities, natural resource conservation districts, regional planning commissions, and watershed organizations, also utilize Tactical Basin Plans to target clean water activities/projects.

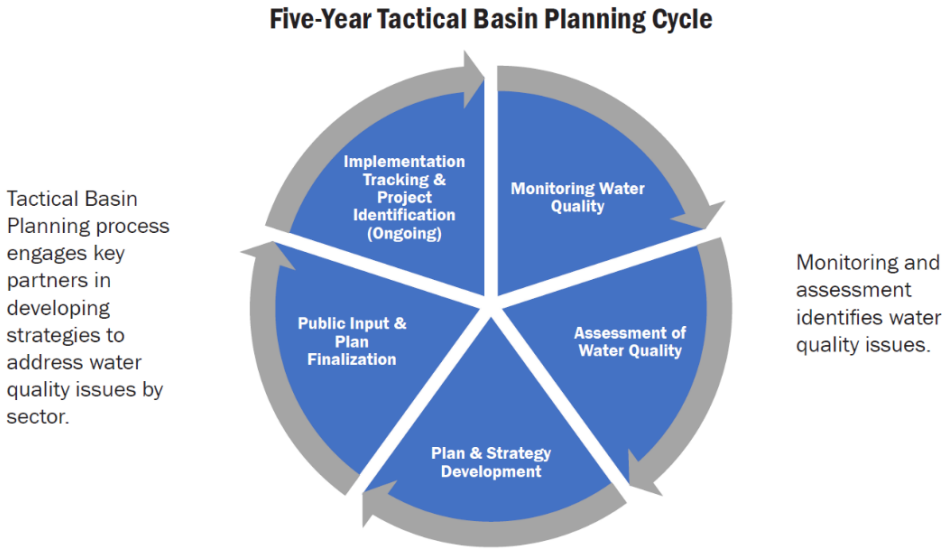
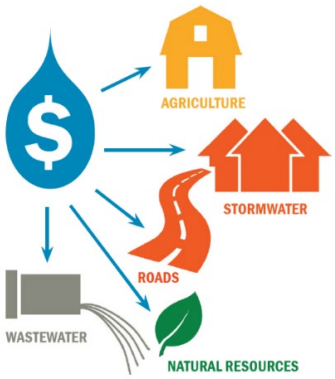


Figure 4. Five-year Tactical Basin Planning cycle

VERMONT'S CLEAN WATER FUND AND BUDGET PROCESS



Vermont's Clean Water Board recommends the state's annual clean water budget, with dollars from the Clean Water Fund and Capital Bill. The Clean Water Board comprises secretaries of five state agencies: Agencies of Administration (AoA); Agriculture, Food and Markets (AAFM); Commerce and Community Development (ACCD); Natural Resources (ANR); and Transportation (VTrans). In addition, four members of the public are appointed by the Governor. Appropriations from the clean water budget are administered by AoA, AAFM, ACCD, ANR, and VTrans, as well as the Vermont Housing and Conservation Board (VHCB). A subset of ANR's appropriation is administered by the DEC's CWIP (see Appendix A, Table 1). This Funding Policy applies to CWIP's appropriation *only* and does not apply to funding programs administered by other departments/agencies.

The Clean Water Board developed its SFY 2021 budget recommendation in Summer 2019 through a public process, consisting of a public comment period and public hearing. The Governor incorporated the Board's budget recommendation in his SFY 2021 budget recommendation, ultimately passed by the State Legislature. Clean Water Fund revenues were later projected to decrease 15 percent due to COVID-19's economic impact. The Clean Water Board held public meetings Summer 2020 to revise its SFY 2021 clean water budget recommendation, later passed by the State Legislature and signed by the Governor in Fall 2020. The restated SFY 2021 clean water budget totaled $31.3 million, with $17.4 million from the Clean Water Fund and $13.9 million from the Capital Bill.

For more information on the Clean Water Board and clean water budget process, visit: https://dec.vermont.gov/water-investment/cwi/board.

PERFORMANCE REPORTING

DEC's CWIP coordinates with State of Vermont agencies to track clean water projects and summarize data annually in the *Vermont Clean Water Initiative Annual Performance Report.* Part 1 of the report, titled *Vermont Clean Water Investment Report,* summarizes state clean water investments and results of those investments. Part 2 of the report, titled *Lake Champlain TMDL Progress Report,* summarizes progress made across state and federal funding programs and regulatory programs implementing the *Phosphorus Total Maximum Daily Loads (TMDLs) for Vermont Segments of Lake Champlain*. Annual Performance Reports are available at: https://dec.vermont.gov/water-investment/cwi/board#reports.

SFY 2021 Clean Water Initiative Program Funding Policy

STATE OF VERMONT CLEAN WATER FUNDS ADMINISTERED BY DEC'S CLEAN WATER INITIATIVE PROGRAM

A subset of ANR's clean water budget appropriation is administered by the DEC's CWIP. Appendix A of this Funding Policy, titled *SFY 2021 CWIP Spending Plan*, explains how CWIP's portion of the SFY 2021 clean budget will be administered at the funding initiative-level. The annual spending plan is subject to change based on administrative capacity and demand for funds throughout the year.

DEC and Partner Roles and Responsibilities

PROGRAMMATIC OVERSIGHT

CWIP provides programmatic oversight of its funding initiatives. This involves coordinating with ANR-DEC leadership and technical programs to establish CWIP's annual Funding Policy and Spending Plan, including definition of eligible clean water project types and associated *required* standard milestones and deliverables.

CWIP coordinates with DEC Technical Project Managers (TPMs), Financial Managers, and Grants Management Specialists (GMSs) to implement the annual Spending Plan, including:

1. Assigning TPMs to each grant or contract (in coordination with ANR-DEC Division Directors and TPMs' supervisors);

2. Establishing target timelines for competitive project procurement (e.g., Requests for Proposals or "RFPs") and agreement development; and

3. Monitoring funding initiatives to ensure compliance with the CWIP Funding Policy and the state's clean water budget.

CWIP also manages technical closeout of grant/contract agreements to ensure project outputs and outcomes are captured in the *Vermont Clean Water Initiative Annual Performance Report.*

FINANCIAL AND GRANTS MANAGEMENT

DEC's Administration and Innovation Division (AID) Financial Managers and Grants Management Specialists (GMSs) provide administrative processing support and financial management of CWIP funding and ensure compliance with DEC's Granting Plan. The Granting

Plan documents the procedures DEC follows for issuance of all grant agreements.

AID GMSs partner with TPMs to facilitate:

1. Competitive procurement of projects, including proposal review and selection processes;
2. Grant or contract agreement and amendment development and execution;
3. Invoice approval and payment processing through ANR Online; and
4. Grant/contract agreement closeout upon approval of final deliverables and payment of final invoice.

AID establishes standard operating procedures and roles and responsibilities for both GMSs and TPMs and provides associated trainings.

TECHNICAL PROJECT MANAGEMENT

Each CWIP-funded grant/contract agreement is overseen by a "Technical Project Manager" (TPM). TPMs are responsible for establishing the scope of work incorporated in competitive project procurement (e.g., Requests for Proposals) and grant/contract agreements. Once an agreement is executed, TPMs provide technical project oversight through review and approval of deliverables and invoices for payment. TPM assignments are made considering area of technical expertise, geographic focus, and capacity.

GRANTEE/CONTRACTOR RESPONSIBILITIES

Local, regional, and statewide organizations receive CWIP grants and contracts. These partner organizations play a key role championing and implementing clean water projects on-the-ground. This Funding Policy establishes grantee/contractor responsibilities to ensure DEC and CWIP can adequately support all grantees/contractors, including the following.

1. CWIP grant/contract applicants are responsible for completing all required materials associated with RFPs, including adherence to submittal deadlines.
2. CWIP grant/contract recipients must sign the DEC agreement within 90-days of receiving the final agreement or the award may be rescinded.
3. CWIP grant/contract recipients, including block grant administrators and sub-recipients, are responsible for adhering to the CWIP Funding Policy and DEC agreement terms and conditions.

4. CWIP grant/contract recipients, including block grant administrators and sub-recipients, are responsible for adhering to CWIP's standard project milestones and deliverables, including completion of final reporting requirements (refer to Appendix C of this Funding Policy). This ensures project outputs and outcomes are captured and grant/contract recipients' efforts are acknowledged in the *Vermont Clean Water Initiative Annual Performance Report* and other communications supporting Vermont's clean water efforts.

5. CWIP grant/contract recipients, including block grant administrators and sub-recipients, are responsible for ensuring that funds directly support water quality improvement goals. Projects and funds must address water quality as the primary priority in all design and implementation recommendations and decisions. Cobenefits, such as public recreation or habitat, may be supported/considered. However, if cobenefits result in additional project costs, cobenefits must be funded with other funding sources.

Determination of Eligibility

This section of the Funding Policy outlines CWIP funding eligibility requirements. These requirements apply to all CWIP funding programs listed in Appendix A of this Funding Policy. Projects funded under CWIP grant/contract agreements must adhere to *all* the following eligibility requirements:

- **Eligibility Screen #1: Project Types and Standards**
  Projects must be eligible under project type definitions and standards.

- **Eligibility Screen #2: Budget**
  Agreement/sub-agreement budgets must only include eligible expenses (including block grant program delivery/administrative costs where applicable).

- **Eligibility Screen #3: Recipient Entities**
  Agreement/sub-agreement recipients must be eligible to receive CWIP funds.

- **Eligibility Screen #4: Project Landowner**
  Landowners of projects' location must be eligible to participate in/benefit from CWIP-funded projects.

- **Eligibility Screen #5: Natural Resource Impacts**
  Projects must not adversely impact natural resources, or where projects will adversely impact natural resources, impacts are allowable as determined by DEC.

- **Eligibility Screen #6: Leveraged Funds Requirements**
  Projects must meet applicable leveraged funds requirements.

- **Eligibility Screen #7: Long-Term Operation and Maintenance**
  Projects must have operation and maintenance plan and agreement in place, signed by responsible party as required in standard milestones and deliverables (see Appendix C).

ELIGIBILITY SCREEN #1: PROJECT TYPES AND STANDARDS

Appendix B of this Policy defines eligible clean water project types and minimum standards that must be met for a project to be eligible under CWIP funding programs. A project's primary purpose must be to improve water quality by reducing nutrient and sediment pollution. Projects must follow standard milestones and deliverables defined by project type in Appendix C of this Policy. Examples of ineligible project types are listed below. Specific operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit) eligibility requirements are listed below.

Ineligible Projects

- Land acquisition (may be used as leveraged funds).[1]

- Projects that solely address flooding, drainage, flood/hazard mitigation, protection of infrastructure or other priorities that do not primarily address sediment or nutrient pollution.

- Projects that can be funded through other grant sources (projects may be eligible if other options are exhausted and justification is provided, subject to CWIP approval). Agriculture projects must first pursue other funding sources (e.g., Agency of Agriculture, Food and Markets, U.S. Department of Agriculture, and Vermont Housing and Conservation Board) before pursuing CWIP funds. Municipal road projects must first pursue other funding sources (e.g., Agency of Transportation) before pursuing CWIP funds. Forestry projects must first pursue other funding sources (e.g., U.S. Department of Agriculture and Vermont Department of Forests, Parks and Recreation) before pursuing CWIP funds.

- Operation and maintenance activities (e.g., road re-grading/surfacing, street sweeping,

[1] Land acquisition projects are ineligible except for the Vermont Fish and Wildlife Department wetland acquisition program funded with CWIP-managed federal Lake Champlain Basin Program dollars.

catch basin cleaning).

- Projects dealing with private driveways, unless the project is addressing regulatory requirements of operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit) and the Municipal Separate Storm Sewer System (MS4) General Permit.
- Stream culvert replacements, unless the project meets the floodplain/stream restoration project definition and standards defined in Appendix B and improves stream geomorphology, as defined/determined by the DEC Rivers Program.
- General outreach and education activities.
- Projects to comply with *Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont* on active logging/harvesting sites.[2]
- Projects related to compliance with the Municipal Separate Storm Sewer System (MS4) Permit Minimum Control Measures.[3]
- Projects related to compliance with the MS4 Permit road standards (municipal road projects are eligible for funding through VTrans).
- Projects that treat stormwater associated with new or expanded impervious surfaces.

Three-Acre General Permit Eligibility Requirements

The following eligibility requirements are specific to operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit) eligibility requirements.[4]

- Three-Acre General Permit projects must meet all eligibility screens in this Funding Policy to be eligible for funds.
- Three-Acre General Permit projects funded with grant/contract funds from the state are ineligible to receive payment from impact fees for achieving treatment above-and-beyond the redevelopment standard.

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[2] *Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont* available at: https://fpr.vermont.gov/forest/managing-your-woodlands/acceptable-management-practices.

[3] For information regarding the Municipal Separate Storm Sewer System (MS4) General Permit, see: http://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/ms4-permit. Projects that contribute to MS4 community(ies) meeting MS4 permit flow and/or phosphorus reduction targets, including projects identified by the MS4 community in a flow restoration plan (FRP) and/or phosphorus control plan (PCP) are eligible for CWIP funds.

[4] For more information regarding the operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit), see: https://dec.vermont.gov/watershed/stormwater/9050.

- Three-Acre General Permit projects must obtain permit coverage for the full site before construction to be eligible for construction funds through CWIP.

- All Three-Acre General Permit projects at public schools and state colleges funded through CWIP are only eligible for funds through the Green Schools Initiative.

- All Three-Acre General Permit projects funded through CWIP in SFY 2021 (except for public schools and state colleges) are only eligible for funds through the design/implementation block grants.[5] The Clean Water Service Delivery Act (Act 76 of 2019) requires the State of Vermont to establish a Developed Lands Implementation Grant Program by July 1, 2022 to provide funding/financing to non-municipal landowners affected by the Three-Acre General Permit. Act 76 of 2019 also requires establishing a Municipal Stormwater Implementation Grant Program to provide funding to support municipal compliance with stormwater regulations, including the Three-Acre General Permit.

- Three-Acre General Permit projects are only located in the Lake Champlain and Lake Memphremagog basins and stormwater-impaired watersheds (i.e., Roaring Brook and the East Branch of Roaring Brook) at this time, with the deadline to obtain permit coverage by 2023.

- Future Three-Acre General Permit sites in other parts of the state are considered non-regulatory projects at this time. If a site is anticipated to fall under the Three-Acre General Permit jurisdiction in the future, the project must meet the Three-Acre General Permit redevelopment standards to be eligible for CWIP funds.

ELIGIBILITY SCREEN #2: BUDGET

Agreement/sub-agreement budget(s) must only include eligible expenses. Ineligible expense types are listed below. If the agreement is a block grant or bulk contract, budget must comply with program delivery/administrative cost limitations. Eligible program delivery/administrative costs are defined below.

CWIP grant/contract recipients, including block grant administrators and sub-recipients, are responsible for ensuring that funds directly support water quality improvement goals. Projects and funds must address water quality as the primary priority in all design and implementation

[5] Active design/implementation block grant information is available at: https://dec.vermont.gov/water-investment/cwi/grants/co-opportunities.

recommendations and decisions. Cobenefits, such as public recreation or habitat, may be supported/considered. However, if cobenefits result in additional project costs, cobenefits must be funded with other funding sources.

Grant/contract recipients and sub-recipients must make every effort to utilize lowest cost materials available to achieve the intended project outcomes. Construction materials should be locally sourced, where feasible. Where a project's landowner prefers higher cost materials than those necessary to achieve project outcomes, the landowner must cover the cost differential.

Ineligible Expenses

- Expenses incurred outside award duration. Agreements must be fully executed (signed by both parties) before incurring expenses. Ninety-day pre-award expenses are no longer authorized for any CWIP agreement.

- Annual fees associated with permits that require/compel implementation of the clean water project, such as stormwater operational permits (including General Permit 3-9050, commonly referred to as the "Three-Acre General Permit"), Municipal Roads General Permit (MRGP), and MS4 Permit fees. Note:

    - One-time/up-front permit fees associated with natural resource permits (e.g., wetlands, rivers, and lake shorelands) to implement a clean water project are an eligible project expense—only when DEC programs determine the project eligible under "Eligibility Screen #5: Natural Resource Impacts."

    - One-time/up-front operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit) application fees are an eligible project expense under "Operational Stormwater Permit Obtainment" project type for three-acre sites eligible to receive CWIP funds.

- Operational stormwater General Permit 3-9050 (i.e., Three-Acre General Permit) impact fees.

- In Lieu Fee payments to mitigate wetland impacts.

- Tools and/or equipment (unless intent of project is to purchase equipment to implement clean water best management practices).

- Office supplies such as computers, cell phones, uniforms/staff apparel.

- Food/beverage/event space costs (such as for a meeting).

- AmeriCorps host site or member costs.
- Political advocacy.
- Fundraising and grant writing.

Block Grant Program Delivery Eligibility

CWIP employs block grants to administer clean water funding. Block grants address DEC capacity constraints, given increased funding levels without increased DEC staff capacity. Block grants also help develop partner capacity to manage clean water projects more independently, while still benefiting from CWIP oversight and technical assistance. CWIP plans to continue to develop and invest in these programs to aid in the transition toward grant programs required under Act 76 of 2019.

A portion of block grant budgets support program delivery (i.e., administrative costs) to fund partner capacity to administer the block grant program. **Program delivery expenses are not to exceed 15 percent of the total award amount**. The remaining 85 percent minimum of the total award amount must be used for project completion. The following sections of the Funding Policy clarify eligibility of program delivery expenses versus project completion expenses.

Block Grant Program Delivery Definition

Program delivery supports grant/subgrant costs associated with administering a block grant program, which may include the following.[6] The 15 percent cap includes all expenses associated with program delivery, including indirect costs of program delivery and elements of program delivery work subgranted (if applicable).

- Implementing a procurement policy;
- Managing the block grant award;
- Selecting and awarding projects to subcontractors;
- Developing and monitoring subgrants and subcontracts;
- Processing subgrantee and subcontractor invoices for payment by DEC;
- Verifying project results; and

[6] Subgrant definition: Funds passed through to other entities to conduct program delivery, which must be contained within the 15 percent program delivery cap for the total award amount.

- Preparing and compiling required block grant deliverables (e.g., interim and final reports and individual project deliverables).

Project Completion Definition

Project completion supports subcontract costs associated with individual projects funded under a block grant.[7] Costs include expenses incurred that directly relate to implementation of the project, including personnel expenses for direct project management. Project completion costs are expressed as a subcontract to the block grant award, including "mark-ups" associated with the project costs that may involve subcontractor indirect and personnel costs. Project completion expenses applied to a CWIP block grant are deducted from the project completion budget and not the program delivery budget.

ELIGIBILITY SCREEN #3: RECIPIENT ENTITIES

Agreement/sub-agreement recipient(s) must be eligible to receive CWIP funds. Table 1 lists entities eligible and ineligible to receive/administer CWIP funds. Eligible entities may obtain CWIP funds and administer a project on land owned by an ineligible entity *only if* the project passes "Eligibility Screen #4: Project Landowner." Projects on private land administered by an eligible entity must include documentation of commitment from the landowner, including operation and maintenance commitment, to be considered eligible.

Table 1. Entities eligible and ineligible to receive/administer CWIP funds

Eligible Entities	Ineligible Entities
Vermont municipalities	Private citizens, individuals
Regional planning commissions	Private for-profit businesses and industries
Natural resource conservation districts	Private for-profit colleges and universities
Non-profit organizations	Federal agencies
State agencies	DEC programs
State colleges and universities	
Public hospitals and medical centers	
Public schools	
Environmental consulting firms	

[7] Subcontract definition: Funds passed through to other entities to complete a project, which must be contained within the 85 percent total award amount dedicated to completing eligible projects.

ELIGIBILITY SCREEN #4: PROJECT LANDOWNER

The landowner associated with a project's location must be eligible to participate in/benefit from CWIP-funded projects, defined in Figure 5. Landowner eligibility varies for public and private landowners and regulatory and non-regulatory projects. Some project types are typically sited on private land, such as natural resource restoration.

Figure 5. Decision tree for determining project eligibility based on landowner type and regulatory considerations

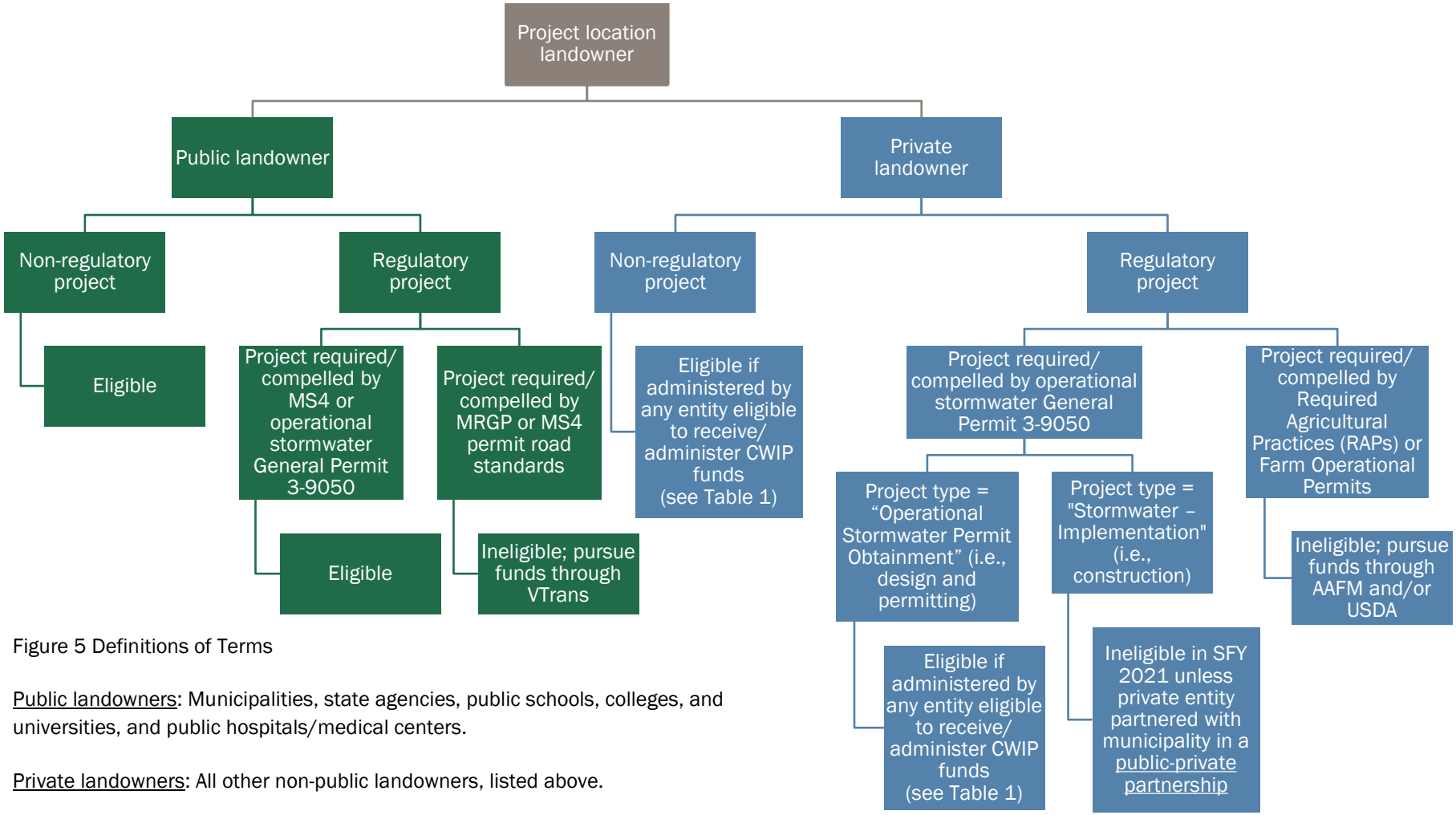


Figure 5 Definitions of Terms

Public landowners: Municipalities, state agencies, public schools, colleges, and universities, and public hospitals/medical centers.

Private landowners: All other non-public landowners, listed above.

Non-regulatory projects: Implementation of project is completely voluntary and is not required/compelled by water quality-related regulatory programs.

Regulatory projects: Implementation of project is required/compelled by water quality-related regulatory programs.

Stormwater regulatory public-private partnership: See definition in Figure 7 definitions of terms.

ELIGIBILITY SCREEN #5: NATURAL RESOURCE IMPACTS

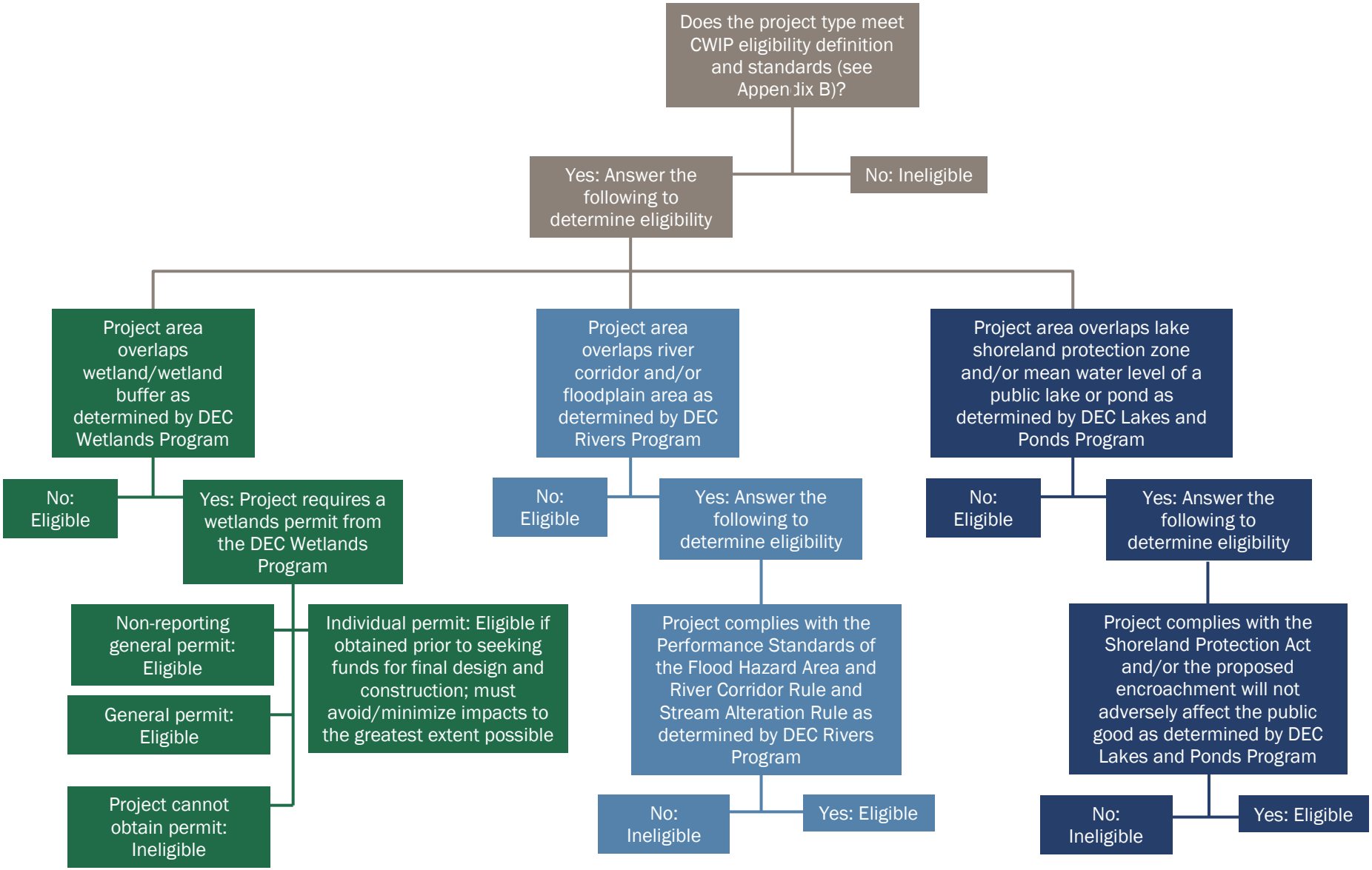
Projects that result in long-term adverse impacts to natural resources are not eligible to receive CWIP funds, unless DEC programs permit the project following the decision tree shown in Figure 6.[8]

There is no evaluation of net water quality benefit currently for wetland impacts associated with clean water projects. Project proponents should strive to avoid wetland resources whenever possible. Methods to account for phosphorus storage and attenuation of wetlands are under development. The decision tree will be updated once the wetland accounting method is in place. In the interim, projects that require a wetland non-reporting general permit or general permit are eligible for funds. Projects that require a wetlands individual permit may be eligible for funds if the individual permit is obtained prior to seeking funds for final design and construction. In accordance with the Wetlands Rule, permits cannot be issued when alternative project locations and sizes (i.e., project footprint) are possible.

Applicants and grant/contract recipients are responsible for confirming and documenting project eligibility where adverse natural resource impact(s) may result from implementation of clean water projects. Applicants and grant/contract recipients must contact the appropriate DEC programs to determine project eligibility. DEC program contacts are available by project location using the Water Quality Project Screening Tool, available at: https://anrweb.vt.gov/DEC/cleanWaterDashboard/ScreeningTool.aspx. Funding priorities are informed by potential projects in the Watershed Projects Database (WPD). However, projects in the WPD may not be fully screened for eligibility related to adverse natural resource impact(s). DEC's Watershed Planning Program is developing standard operating procedures to facilitate DEC programs' review of clean water projects, including determination of eligibility where projects cause adverse natural resource impacts.

[8] "Long-term" is defined as extending beyond the construction or installation of the practice. There may be short-term impacts to natural resources that occur as the result of the construction or installation of water quality improvement projects. CWIP will require adequate erosion and sediment controls to minimize or avoid those short-term impacts.

Figure 6. Decision tree for determining eligibility where project presents adverse natural resource impacts



ELIGIBILITY SCREEN #6: LEVERAGED FUNDS REQUIREMENTS

Projects must meet leveraging requirements (if applicable) to be eligible for CWIP funds, as defined in Figure 7. Leveraging requirements are subject to change in future years. Leveraging requirements do not apply to block grant program delivery/administrative costs, only to costs of individual projects funded under block grant agreements.

Definition of Leveraged Funds

"Leveraged funds" or "leveraging" (referred to as match in previous funding policies) are defined as a financial commitment toward the project costs from a source other than the State of Vermont. Leveraging can be achieved by a commitment from the grantee/contractor or through other funding programs, including in the form of cash or in-kind services directly related to the project. Leveraged funds may only be committed for one project and cannot be committed to multiple projects. All expenses covered through leveraging must be incurred within the duration of the grant/contract agreement. If the project comes in under budget, leveraged funds may also decrease, but must remain at least the same percentage of the total project cost as written into the original agreement.

Table 2. Eligible and ineligible sources of leveraged funds

Eligible Leveraged Funds	Ineligible Leveraged Funds
In-kind (e.g., time, labor, transportation)	Funds leveraged/matched to other projects
Cash from non-state funding sources	Funds obtained from other State of Vermont clean water funding sources[10]
Clean Water State Revolving Fund (CWSRF) loans	Expenses incurred outside award duration
Equipment used to complete project	Expenses related to political advocacy
Land acquisition/easement for project location	Expenses related to fundraising
AmeriCorps member time[9]	Expenses related to grant writing

[9] AmeriCorps member time = (host site fee / total AmeriCorps member hours) x number of hours worked on the project. Note: AmeriCorps member time is not eligible to be used as match for any purpose, however, it can be considered as leveraged funds for the CWIP only.

[10] Funds obtained from State of Vermont clean water funding sources are ineligible to use as leveraged funds on CWIP-funded projects because this could result in double counting of leveraged contributions in the *Vermont Clean Water Initiative Annual Performance Report.* State of Vermont clean water funding sources include funds obtained through Vermont Agencies of Agriculture, Food and Markets; Commerce and Community Development; Natural Resources; and Transportation, as well as the Vermont Housing and Conservation Board with funds from the Clean Water Fund, Capital Bill, Federal and State Transportation Funds, General Fund, Watershed Grant Fund, Housing and Conservation Trust Fund, and Act 250 Mitigation Fund.

Tracking and Reporting Leveraged Funds

Grantees/contractors are responsible for tracking and retaining records to verify leveraged funds and reporting the final leveraged amount in final deliverables (i.e., Form 430-M included in standard milestones and deliverables, see Appendix C). Grantees/contractors must retain all back-up documentation of leveraged funds for five years for state-funded projects (e.g., Clean Water Fund state funding source) and seven years for federal-funded projects (e.g., Lake Champlain Basin Program federal funding source). This can include, but is not limited to, payroll logs for donated professional services, volunteer timesheets, mileage logs, and accounting information for donations.

Grantee/Contractor use of CWIP Funds for Match

CWIP grantees/contractors cannot use CWIP funds to meet match requirements of other funding sources. DEC uses CWIP funds to meet DEC match requirements.

Figure 7. Decision tree for determining leveraged funds requirements based on regulatory considerations and landowner/permittee type. Only includes regulatory activities eligible for CWIP funds. *Leveraged funds requirements subject to change in future years*.

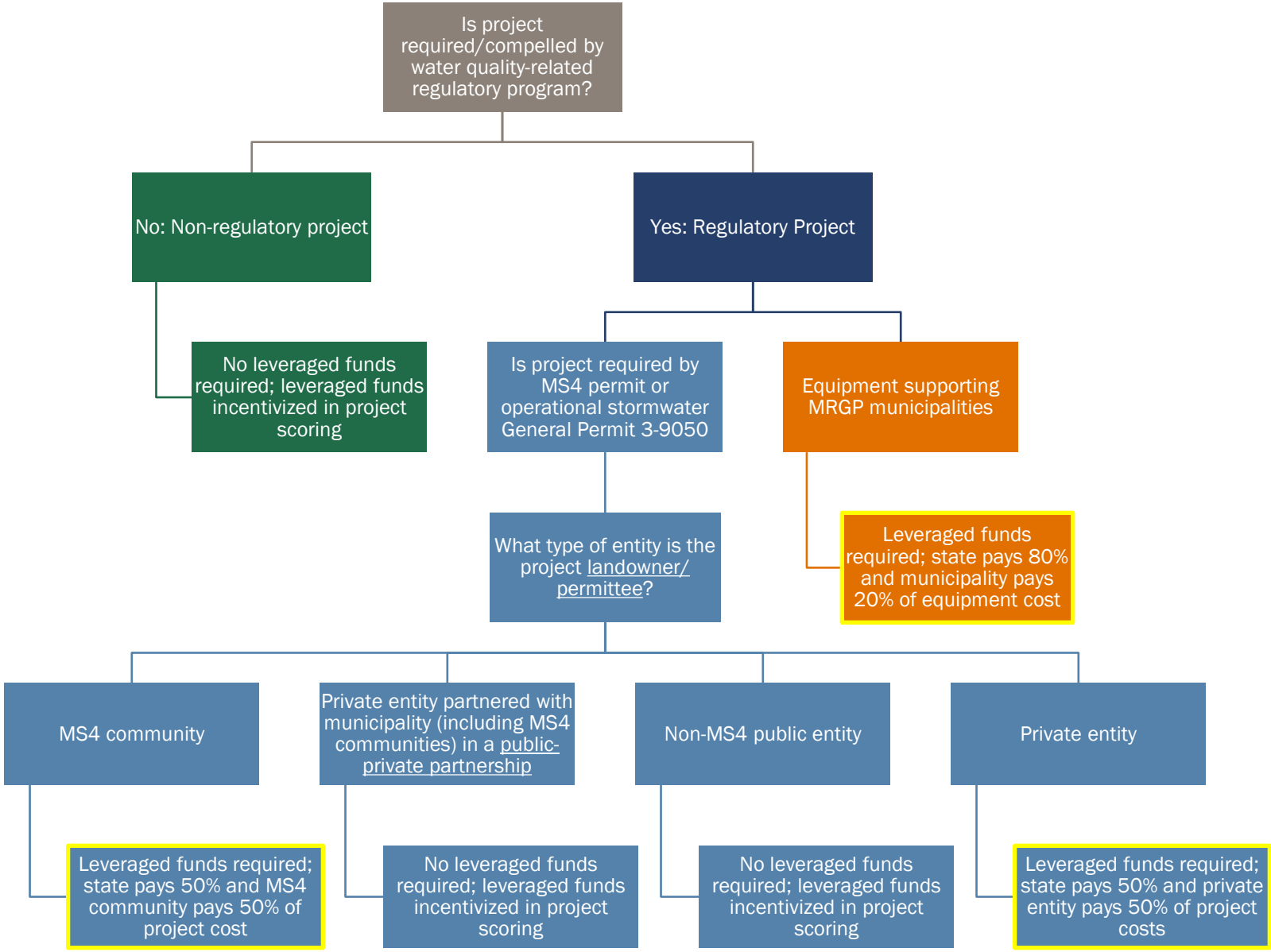


Figure 7 Definitions of Terms

- Non-regulatory projects: Implementation of project is completely voluntary and is not required/compelled by water quality-related regulatory programs.

- Regulatory projects: Implementation of project is required/compelled by water quality-related regulatory programs.

- MS4 permit regulatory project: Project that contributes to MS4 community(ies) meeting MS4 permit flow and/or phosphorus reduction targets, including projects identified by the MS4 community in a flow restoration plan (FRP) and/or phosphorus control plan (PCP). Excludes MS4 projects implemented to meet road standards (eligible for funds through VTrans).

- MS4 communities: Entities, listed as follows, required to comply with the Municipal Separate Storm Sewer System (MS4) permit.

  City of St. Albans
  Town of St. Albans
  City of Burlington
  Burlington International Airport
  Town of Colchester
  Town of Essex
  Village of Essex Junction
  Town of Milton
  Town of Rutland
  Town of Shelburne
  City of South Burlington
  University of Vermont
  Town of Williston
  City of Winooski
  Vermont Agency of Transportation[11]

- Public landowners/permittees: Municipalities, state agencies, public schools, colleges, and universities, and public hospitals/medical centers.

- Private landowners/permittees: All other non-public landowners, listed above.

- Stormwater regulatory public-private partnership: Collaboration of municipal and private landowners to complete stormwater treatment design and construction projects that maximize stormwater treatment and cost-effectiveness resulting in private landowner/permittee achieves compliance with the Three-Acre General Permit for its privately-owned site and at least one of the following:

  - Municipal landowner/permittee achieves compliance with the Three-Acre General Permit for its municipally owned/operated site *and/or* implements an MS4 permit regulatory project (defined above).

  - Treatment of additional offsite non-regulatory/sub-jurisdictional stormwater from privately and/or publicly owned land.

[11] Vermont Agency of Transportation (VTrans) operates under the jurisdiction of the *Transportation* Separate Storm Sewer System (TS4) permit, which is an MS4 permit.

Voluntary Leveraging

Where leveraging is not required, it may be incentivized in RFP scoring criterion for leveraging. Proposals that leverage funds are scored more favorably than other proposals under this scoring criterion. Even if leveraging is voluntary for a given project, if a proposal is competitively scored based on leveraging and selected for funds, the leveraging becomes a legal obligation within the grant/contract agreement.

Required Leveraging

Leveraged funds are currently only required for some regulatory projects depending on the landowner/permittee type. The three scenarios, shown in Figure 7, that require leveraged funds are further described in Table 3, including rationale for the requirements.

Table 3. Scenarios where leveraged funds are required to be eligible for CWIP funds

Scenario	Leveraging Requirement	Rationale
MS4 Permit Regulatory Project	State pays up to 50 percent and MS4 community pays at least 50 percent of project cost	The MS4 regulatory project leveraging requirement ensures geographic distribution of limited clean water funds. CWSRF loans are eligible as a source of leveraging. The leveraging requirement is waived when an MS4 community takes on a stormwater regulatory public-private partnership (as defined above) to incentivize public-private partnerships.
Equipment supporting MRGP municipalities	State pays up to 80 percent and municipality pays at least 20 percent of equipment cost	The leveraging requirement associated with municipalities' purchase of equipment to support MRGP compliance is consistent with VTrans statutory cost share requirement for other road-related projects.
Private landowner/ permittee Three-Acre General Permit project	State pays up to 50 percent and private entity pays at least 50 percent of project cost	The private landowner/permittee Three-Acre General Permit leveraging requirement ensures distribution of limited funds to support permit compliance in SFY 2021. Private entities are only eligible to access funding for Three-Acre General Permit design and permit obtainment in SFY 2021. Private entities are not eligible to access construction funds in SFY 2021 unless under a stormwater regulatory private-public partnership (as defined above). Entities will have five years to complete construction following permit obtainment. The Clean Water Service Delivery Act (Act 76 of 2019) requires the State of Vermont to establish a Developed Lands Implementation Grant Program by July 1, 2022 to provide funding/financing to non-municipal landowners affected by the Three-Acre General Permit.

ELIGIBILITY SCREEN #7: LONG-TERM OPERATION AND MAINTENANCE

Projects constructed/implemented with CWIP funds are required to establish and submit to CWIP an operation and maintenance plan and agreement, following CWIP-provided templates.[12] The plan and agreement identify the entity responsible for operation and maintenance and ensure a project performs properly throughout its useful lifespan. The operation and maintenance responsible party must be established for a project to be eligible for implementation/construction funds. CWIP will assess and verify the operation and maintenance status of select projects post-construction to monitor project performance.

Anticipated Future Funding Policy Updates

CWIP anticipates future Funding Policy updates will address two priority areas, described in the following sections. Implementation of the Clean Water Service Delivery Act (Act 76 of 2019) will restructure CWIP funding programs into four new statutory grant programs. DEC has several efforts underway to better address environmental justice and diversity, equity, and inclusion in its programs. CWIP is participating in these efforts to make improvements to its funding programs.

CLEAN WATER SERVICE DELIVERY ACT (ACT 76 OF 2019)

The Clean Water Service Delivery Act (Act 76 of 2019) changes the administration and implementation of clean water funds in the State of Vermont, effective in SFY 2023. Relevant to this Funding Policy, Act 76 of 2019 requires the establishment of four new grant programs going into effect July 1, 2022 (aligns with SFY 2023), described in the following sections, that will replace current CWIP funding programs. The Clean Water Board will determine funding levels of each program through its annual public budget process, beginning with the SFY 2023 budget.

A notable change resulting from Act 76 of 2019, in terms of administering clean water funds, is the establishment of Clean Water Service Providers and the Water Quality Restoration Formula Grant Program. Clean Water Service Providers, for watersheds draining to Lake Champlain and Lake Memphremagog, must be established through rulemaking by November 1, 2020. Service Providers, along with Basin Water Quality Councils, will be responsible for identifying, prioritizing, developing, and implementing projects to meet a five-year phosphorus reduction target. The Service Providers' phosphorus reduction targets will be associated with non-regulatory activities under the Lake Champlain and Lake Memphremagog TMDLs to ensure voluntary measures (i.e., not driven by clean water regulations) will be met and TMDL targets will be achieved. Additionally, a Service Provider

[12] CWIP's operation and maintenance plan and agreement template is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources#Final.

will be responsible for the long-term operation and maintenance of all non-regulatory clean water projects in its region.

CWIP is required to maintain grant programs in the interim. However, this CWIP Funding Policy and the SFY 2021 grant programs and spending plan will continue to support programs that will aid in the transition required by Act 76 through:

- Building partner capacity to manage clean water funds through expansion of block grant programs;
- Enhancing project identification, prioritization, and development activities to increase the number of projects ready to proceed to design and construction; and
- Bridging gaps in the state's ability to establish interim pollutant reduction targets and account for nutrient pollutant reductions at the project-level.

§ 925. Clean Water Service Provider, Water Quality Restoration Formula Grant Program

Grants to clean water service providers to meet non-regulatory pollutant reduction requirements. The grant amount shall be based on the annual pollutant reduction goal established for the clean water service provider multiplied by the standard cost for pollutant reduction including the costs of administration and reporting. Not more than 15 percent of the total grant amount awarded to a clean water service provider shall be used for administrative costs.

§ 926. Water Quality Enhancement Grant Program

Competitive grant program to fund projects that protect high quality waters, maintain or improve water quality in all waters, restore degraded or stressed waters, create resilient watersheds and communities, and support the public's use and enjoyment of the state's waters. Not more than 15 percent of the total grant amount awarded shall be used for administrative costs.

§ 927. Developed Lands Implementation Grant Program

Grant program to provide grants or financing to persons who are required to obtain a permit to implement regulatory requirements that are necessary to achieve water quality standards, including financing for projects related to the permitting of impervious surface of three acres or more. Not more than 15 percent of the total grant amount awarded shall be used for administrative costs.

§ 928. Municipal Stormwater Implementation Grant Program

Grant program to provide grants to any municipality required to obtain or seek coverage under the Municipal Roads General Permit (MRGP), the Municipal Separate Storm Sewer Systems Permit

(MS4), a permit for impervious surface of three acres or more, or a permit required by the Secretary to reduce the adverse impacts to water quality of a discharge or stormwater runoff. Not more than 15 percent of the total grant amount awarded shall be used for administrative costs.

ENVIRONMENTAL JUSTICE AND DIVERSITY, EQUITY, AND INCLUSION

DEC has several efforts underway to address environmental justice and diversity, equity, and inclusion in its funding programs. CWIP plans to better address these considerations in future CWIP Funding Policies based on the results and policy recommendations of these initiatives. Of note:

- A Vermont Certified Public Manager consultant team is working on environmental justice policy recommendations for DEC funding programs. This work will help DEC achieve more meaningful public participation and ensure more equitable and just environmental outcomes across all of Vermont's communities. This will include a general survey or overview of current DEC permitting and funding procedures, including the minimum legal requirements for public notice and participation, and recommendations for environmental justice best practices to incorporate into DEC funding programs. Best practices will be drawn from the U.S. Environmental Protection Agency, other state environmental agencies, and environmental justice groups and leaders.

- The Rural Environmental Justice Opportunities Informed by Community Expertise (REJOICE) Partnership is conducting community outreach to identify ways DEC currently works towards environmental justice, and where there are opportunities for improvement toward reaching the goal of equity under all governmental policies and decisions. REJOICE is researching state government's ability to enhance meaningful involvement in environmental decision-making and ensure the fair distribution of environmental benefits and burdens.

- DEC will be working moving forward in Spring 2021 with development of an interactive environmental justice mapping tool, developing a DEC public participation plan, and training staff on principals of environmental, social, and racial justice.

- The Agency of Natural Resources is implementing its civil rights compliance program which includes a language access plan, access for those with disabilities, and a discrimination grievance procedure.

CWIP is also working with the Watershed Planning Program to better integrate environmental justice and diversity, equity, and inclusion considerations in the Tactical Basin Planning process that drives clean water project identification, prioritization, and implementation.

Appendices

APPENDIX A: STATE FISCAL YEAR (SFY) 2021 CWIP SPENDING PLAN

CWIP translates its annual clean water budget appropriations from the Clean Water Fund, presented in Appendix A Table 1 below, into annual spending plans. Appendix A Table 3 presents the SFY 2021 CWIP spending plan. The CWIP spending plan is a communication and planning tool to provide information to clean water project proponents and prospective grant/contract recipients on the types of funding programs and initiatives available in the coming year. CWIP's spending plan also serves as an internal planning tool to track annual progress implementing funding programs and initiatives.

For more information on CWIP funding opportunities, visit: https://dec.vermont.gov/water-investment/cwi/grants.

CWIP spending plans are subject to change throughout the course of the year based on demand and administrative capacity. While the spending plan is subject to change, it will remain consistent with the clean water budget line item activities and total dollar amounts, shown in Table 1.

CWIP-Administered Clean Water Budget Line Items

Table 1 shows an excerpt from the SFY 2021 clean water budget excerpts of CWIP-administered line items. All CWIP-administered line items are funded wholly from the Clean Water Fund. CWIP administers funds consistent with the SFY 2021 clean water budget.

Table 1. CWIP-administered SFY 2021 clean water budget line items

No.	Sector	Clean Water Budget Line Item	Amount
6	Innovation	Multi-Sector Innovation, Grant Administration and Partner Support	$2,393,734
7	Natural Resources	Natural Resources Restoration	$3,234,503
8	Natural Resources	Lakes in Crisis Fund[13]	$50,000
13	Stormwater	Stormwater Project Delivery, Planning, and Implementation	$3,842,763
17	Wastewater	Wastewater Treatment Facility Operators Support	$110,000
		Total	$9,631,000

[13] Lakes in Crisis funds, shown in the table below, are administered by the DEC Watershed Management Division Lakes and Ponds Program. In some cases, Lakes in Crisis funds are paired with CWIP-administered Clean Water Fund dollars to fund projects in the Lake Carmi watershed.

CWIP-Administered Lake Champlain Basin Program Federal Funds

CWIP administers projects funded by the federal U.S. Environmental Protection Agency through the Lake Champlain Basin Program (LCBP). CWIP-administered LCBP-funded projects for Federal Fiscal Year 2020 align approximately with SFY 2021 and are shown in Table 2. The CWIP Funding Policy applies to these LCBP-funded projects.

Table 2. CWIP-administered projects funded by the U.S. Environmental Protection Agency through the LCBP that align approximately with SFY 2021

Project Name	**Amount**
Municipal Wastewater Treatment Facility (WWTF) Optimization to Reduce Effluent Phosphorus	$150,000
Forest Phosphorus Load Allocation: Developing Assessment and Planning Tools for Implementation of the Lake Champlain TMDLs	$100,000
Implementing Methods to Map, Inventory, and Prioritize Non-Municipal Road Improvements in Vermont and Pilot Best Management Practice (BMP) Implementation at Priority Sites	$100,000
Increasing Capacity and Resources to Improve Lake Wise Shoreland Management Practices in Vermont	$62,000
Winooski Headwaters Targeted Phosphorus Intervention	$825,000
Deer Brook Gully Restoration Project	$400,000
Lake Carmi Watershed Restoration	$200,000
Priority Wetland Acquisition, Restoration, and Conservation to Improve Water Quality in Vermont's Lake Champlain Basin (through Department of Fish and Wildlife)	$1,650,000
Enhanced Agricultural Practice Implementation (through Agency of Agriculture, Food and Markets)	$1,150,000
Stormwater Planning, Design, and Construction of Green Stormwater Infrastructure at Public Schools and Vermont State Colleges in the Lake Champlain Basin in Vermont (i.e., Green Schools Initiative)	$2,161,000
Total	$6,798,000

Table 3. CWIP SFY 2021 Clean Water Fund spending plan. **Subject to change**. "Clean Water Budget Line Item" corresponds to budget line items in Table 1. Clean water budget line item abbreviations are defined as follows.

SFY 2021 Clean Water Budget Line Item	Abbreviation
Multi-Sector Innovation, Grant Administration and Partner Support	Multi-Sector
Natural Resources Restoration	NR
Lakes in Crisis Fund	Lakes-in-Crisis
Stormwater Project Delivery, Planning, and Implementation	SW
Wastewater Treatment Facility Operators Support	WWTF

	I. Ecosystem Restoration Grants	Amount	Clean Water Budget Line Item
1	Dam Removal - Design and Implementation	500,000	NR
2	Stream Geomorphic Assessments and River Corridor Plans - Project Identification	106,503	NR
3	Lake Watershed Action Plans - Project Identification	60,000	NR
4	Lake Wise Assessments - Project Identification	18,000	NR
5	Stormwater Master Plans - Project Identification	195,000	SW
6	Shelburne Gravel Wetland Amendment (2017-CWF-2-03.01)	201,874	SW
	SUBTOTAL (I)	**1,081,377**	
II. Clean Water Block Grants and Bulk Contracts			
7	Green Schools Initiative - Lake Memphremagog	140,000	SW
8a	Design/Implementation Block Grant – Stormwater	2,000,000	SW
8b	Design/Implementation Block Grant - Three-Acre General Permit	1,142,889	SW
8c	Design/Implementation Block Grant - Natural Resources	1,000,000	NR
9	Municipal Roads Grants-in-Aid Equipment	115,000	SW
10	River Corridor Easement Block Grant	990,000	NR
11	River Corridor Easement Block Grant Survey Technical Assistance	10,000	NR
12	Woody Riparian Buffer Block Grant	250,000	NR
	SUBTOTAL (II)	**5,647,889**	
III. Clean Water Contracts and MOAs			
13	Illicit Discharge Detection and Elimination (IDDE) Contract	48,000	SW
14	Lakes in Crisis Fund	50,000	Lakes in Crisis
15	Regional Conservation Partnership Program Wetland Incentives	250,000	NR
16	Forestry WQ Assistance (ANR Roads and Trails Assessment Phase 2)	50,000	NR
17	Agricultural Emergency Remediation	10,000	Multi-Sector
	SUBTOTAL (III)	**408,000**	
IV. Partnership Grants and Contracts			
18	Watershed Work Crew Block Grant	215,000	Multi-Sector
19	Tactical Basin Planning Support	500,000	Multi-Sector
20	UVM Sea Grant - Green Infrastructure Cooperative	72,000	Multi-Sector
21	UVM Sea Grant - Lake Watershed Management	8,000	Multi-Sector
22	Municipal Wastewater Treatment Plant Optimization Project	110,000	WWTF
	SUBTOTAL (IV)	**905,000**	
V. Analytical Services			
23	LaRosa Partnership Program Analytical Services	100,000	Multi-Sector
24	Lake Champlain Subwatershed Conservation Effects Assessment Program (CEAP)	51,000	Multi-Sector
	SUBTOTAL (V)	**151,000**	
VI. Innovation			
25	Innovation Grants and Contracts (Phase 2 Phosphorus Innovation Challenge)	305,110	Multi-Sector
	SUBTOTAL (VI)	**305,110**	
VII. Program Development and Capacity			
26	Technical Development of Tracking, Accounting, Target-Setting	70,000	Multi-Sector
27	Clean Water Service Provider Start-up	350,000	Multi-Sector
28	Project Development Block Grant	350,000	Multi-Sector
29	Three-Acre General Permit Finance Development	142,082	Multi-Sector
30	Grant and Financial Management Personnel	220,542	Multi-Sector
	SUBTOTAL (VII)	**1,132,624**	
	TOTAL	**9,631,000**	

Appendix B: Clean Water Initiative Program Eligible Project Types Definitions and Standards

The Vermont Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP) has established standard project types and steps (e.g., final design) that are eligible for funding. The following tables contain CWIP standard project types and corresponding definitions, standards, and mandatory performance measures. Projects that do not fit into the following project types are ineligible (unless approved by CWIP). If a project spans multiple project types, or it is unclear which project type to assign, please contact the Technical Project Manager to determine the appropriate type.

Tables group project types by sector and subsector (organized alphabetically) and project step. Project steps include assessment/project identification; preliminary engineering/design (step 1); final engineering/design (step 2); and implementation/construction (step 3). Some projects do not require preliminary and/or final engineering/design to be prepared for implementation. All agreements include anticipated performance measures, and grantees/contractors must report on performance measures achieved in the mandatory Final Performance Report for each individual project. See Appendix C for corresponding standard milestones and deliverables by project type.

CWIP may fund grants/contracts that result in completion of multiple projects, such as block grants. Individual projects funded under a multi-project agreement must meet eligibility requirements and performance measures must be reported based on individual project type.

CWIP may fund other technical capacity building and technical development activities as needed to support clean water project prioritization, development, implementation, tracking, and accounting. Performance measures will be defined for other technical activities as needed.

List of Tables

Table 1. CWIP eligible project types and definitions, standards, and mandatory performance measures for the agriculture sector

Project Type	Step	Definition	Performance Measures
Agricultural Pollution Prevention – Identification	NA	Assessments of agricultural lands (including cropland, pastureland, barnyards, and production areas) to target pollution prevention projects. These assessments identify areas with the highest contributions of pollutants. Work includes project development and prioritization to target cost effective actions.	Acres assessed/covered by plan Number of projects identified
Agricultural Pollution Prevention – Engineering Design	1	Determination of feasibility and design of agricultural best management practices that reduce pollutants (e.g., nutrients, pathogens, sediment) and improve soil health. Work includes determining landowner interest, site/design considerations, and overall suitability in implementing agricultural BMPs.	Number of preliminary (30%) designs completed Number of final (100%) designs completed
Agricultural Pollution Prevention – Implementation	3	Implementation of agricultural best management practices that reduce pollutants (e.g., nutrients, pathogens, sediment) and improve soil health.	Acres of agricultural land treated

Table 2. CWIP eligible project types and definitions, standards, and mandatory performance measures for the developed lands sector roads subsector

Project Type	Step	Definition	Performance Measures
Road Erosion Inventory	NA	Inventory of a road network to identify specific road erosion and stormwater problems impacting water quality and prioritized project strategies to address those issues. Municipal road erosion inventories must follow the Municipal Roads General Permit (MRGP) standards. The MRGP inventory may be adapted/adopted to non-municipal road networks (e.g., private roads, forest roads) for priority areas with DEC approval.	Linear miles assessed/covered by plan Number of projects identified
Road Project – Identification	NA	Identification of potential locations to implement road projects outside of a Road Erosion Control Inventory that will correct high priority road related erosion problems and/or collect, store, infiltrate, and filter runoff from transportation infrastructure. Work includes project development and prioritization to target cost effective actions.	Linear miles assessed/covered by plan Number of projects identified
Road Project – Preliminary Engineering Design	1	Preliminary determination of feasibility and design of projects to correct road related erosion problems for gravel and paved roads and road drainage culverts (e.g., ditches, turnouts, check dams, culvert armoring) and stormwater treatment practices to collect, store, infiltrate, and filter runoff from transportation infrastructure (e.g., bioretention, gravel wetlands, wet ponds). Work includes determining landowner/ municipal interest, site/design considerations, permit needs, and overall suitability for implementing project.	Number of preliminary (30%) designs completed

Project Type	Step	Definition	Performance Measures
Road Project – Final Engineering Design	2	Final design of projects to correct road related erosion problems for gravel and paved roads and road drainage culverts (e.g., ditches, turnouts, check dams, culvert armoring) and stormwater treatment practices that collect, store, infiltrate, and filter runoff from transportation infrastructure (e.g., bioretention, gravel wetlands, wet ponds). Work includes obtaining any required permits.	Number of final (100%) designs completed
Road Project – Implementation	3	Implementation of projects to correct road related erosion problems for gravel and paved roads and road drainage culverts (e.g., ditches, turnouts, check dams, culvert armoring) and stormwater treatment practices that collect, store, infiltrate, and filter runoff from transportation infrastructure (e.g., bioretention, gravel wetlands, wet ponds).	Number of drainage structures installed/repaired[1] Linear feet of road drainage improved

Table 3. CWIP eligible project types and definitions, standards, and mandatory performance measures for the developed lands sector stormwater subsector

Project Type	Step	Definition	Performance Measures
Stormwater utility development	NA	Stormwater Utilities provide a dedicated revenue source for stormwater management activities, such as the design, construction, maintenance, and administration of stormwater systems, as well as best management practices and other strategies to control and reduce stormwater runoff pollution to surface waters.	Acres of impervious surface covered by an adopted stormwater utility
Stormwater – Illicit Discharge Detection and Elimination (IDDE)	NA	Illicit Discharge, Detection, and Elimination (IDDE) assessment to detect unauthorized/illicit discharges of wastewater or industrial process water into a stormwater-only drainage system. When illicit discharges are detected and confirmed, municipalities are required to address the illicit discharge, preventing wastewater or industrial process water from entering surface waters through stormwater-only infrastructure.	Number of illicit/unauthorized discharges confirmed
Stormwater Master Plan	NA	Assessment of a geographic area (sub watershed or town) to determine where stormwater pollution is generated, and where it can be captured and removed efficiently by projects. Results in a prioritized list of projects and strategies to address/mitigate stormwater runoff, and contain recommendations to preserve natural features and functions, as well as encourage use of low impact green stormwater infrastructure.	Acres assessed/covered by plan Number of projects identified

[1] This refers to smaller erosion control structures/retrofits such as culvert headers (stabilize where water enters/leaves existing culverts) and water bars. This does not include upgrades/replacements of road drainage culverts or stream culverts. Watershed crews may use this measure.

Project Type	Step	Definition	Performance Measures
Stormwater – Preliminary Engineering Design	1	Preliminary determination of feasibility and design of stormwater management practice(s) that collect, store, infiltrate, and filter runoff that contains nutrient and sediment pollution from hard surfaces associated with developed/urban/suburban areas. Work includes determining landowner interest, site/design considerations, permitting needs, and overall suitability for project implementation. Work must result in at least 30% design of project which includes a design concept report, topographic and boundary survey, geotechnical report, and project drawings/ specifications.	Number of preliminary (30%) designs completed
Stormwater – Final Engineering Design	2	Final design of stormwater management practice(s) that collect, store, infiltrate, and filter runoff that contains nutrient and sediment pollution from hard surfaces associated with developed/urban/suburban areas. Work includes securing permit(s) and final operation and maintenance plan agreement(s).	Number of final (100%) designs completed
Operational Stormwater Permit Obtainment	2	Design and permitting of stormwater management practice(s) to comply with Operational Stormwater Permit requirements (e.g., General Permit 3-9050 referred to as the "Three-Acre General Permit") involving treatment of existing impervious surfaces. Project readiness for permitting can vary based on prior design work completed for the site, and 30%, 60%, and 100% design stages may not be required for all projects.	Number of preliminary (30%) designs completed (if applicable) Number of final (100%) designs completed (if applicable) Number of operational stormwater permits obtained
Stormwater/ Roads Equipment	3	Purchase of stormwater equipment with demonstrated water quality benefit to enhance/improve the application/installation of best management practices that will reduce erosion and control nutrient and sediment pollution (e.g., high efficiency street sweepers, and vacuum (vactor) trucks/trailers, hydroseeders). Requires establishment of long-term use and maintenance plan (minimum of ten years). If more than one entity, would require the establishment of an equipment share/rental program.	Hours equipment in use per year Linear feet of road drainage improved Road miles swept through use of equipment per year Acres stabilized through use of hydroseeder/mulcher equipment per year
Stormwater – Implementation	3	Implementation of Tier 1 or Tier 2 stormwater management practice(s) that collect, store, infiltrate, and filter runoff that contains nutrient and sediment pollution from existing impervious, hard (e.g., paved) surfaces associated with developed/urban/suburban areas. Permit(s) and operation and maintenance plan agreement(s) are in place prior to construction. Refer to *2017 Vermont Stormwater Management Manual* for more information on Tier 1 and Tier 2 practices.	Acres of impervious surface treated Acres of impervious area removed (if applicable)

Table 4. CWIP eligible project types and definitions, standards, and mandatory performance measures for the natural resources sector forest subsector

Project Type	Step	Definition	Performance Measures
Forestry – Identification	NA	Assessments of forest logging roads, trails, and/or stream crossings to identify areas with the highest levels of erosion and nutrient and sediment pollution. These assessments identify project areas and prioritize project strategies to address where implementing forestry Acceptable Management Practices (AMPs) would be most beneficial and cost-effective in order to reduce erosion to control nutrient and sediment pollution.	Linear miles assessed/covered by plan Number of projects identified
Forestry – Design	2	Final design of forest logging road, trail, and/or stream crossing Acceptable Management Practices (AMPs) project(s) to address erosion to control nutrient and sediment pollution at prioritized locations.	Number of final (100%) designs completed
Forestry – Implementation	3	Implementation of Acceptable Management Practices (AMPs) to address legacy forest erosion from forest and logging roads, trails, and/or stream crossing to control nutrient and sediment pollution at prioritized locations.	Linear feet of road drainage improved Number of stream crossings improved
Forestry – Equipment	3	Purchase or construction of forestry equipment with demonstrated water quality benefit to enhance/improve the implementation of Acceptable Management Practices (AMPs) on logging jobs in Vermont. The AMPs will address water quality concerns and reduce erosion to control nutrient and sediment pollution (e.g., portable skidder bridges that reduce erosion at stream crossings on forest/logging roads).	Number of stream crossings improved

Table 5. CWIP eligible project types and definitions, standards, and mandatory performance measures for the natural resources sector lakes subsector

Project Type	Step	Definition	Performance Measures
Lake Wise Master Planning	NA	Assessments of lake shorelands to identify areas with the highest levels of nutrient/sediment pollution and habitat degradation for targeting pollution prevention and natural resources restoration projects. Work includes project development and prioritization to target cost effective actions.	Acres assessed/covered by plan Number of projects identified
Lake Watershed Action Planning (LWAP)	NA	Assessment to identify the highest nutrient/sediment pollution loading areas of the lake watershed that are resulting in water quality and habitat degradation. LWAP results in a prioritized list of projects and strategies to address the sources of pollution and habitat degradation identified in the assessment.	Acres assessed/covered by plan Number of projects identified

Project Type	Step	Definition	Performance Measures
Lake Shoreland – Preliminary Engineering Design	1	Preliminary determination of feasibility and design of lake shoreland restoration projects and lakeshore nutrient/sediment pollution reduction practices at priority locations. Work includes determining landowner interest, site/design considerations, permitting needs, and overall suitability for implementation.	Number of preliminary (30%) designs completed
Lake Shoreland – Final Engineering Design	2	Final design of lake shoreland habitat restoration projects and/or lakeshore nutrient/sediment pollution reduction practices at priority locations. Work includes securing permit(s) and final operation and maintenance plan agreement(s).	Number of final (100%) designs completed
Lake Shoreland – Implementation	3	Implementation of lake shoreland habitat restoration projects and/or lakeshore nutrient/sediment pollution reduction practices at priority locations.	Acres of lake shore restored Linear feet of lake shore restored

Table 6. CWIP eligible project types and definitions, standards, and mandatory performance measures for the natural resources sector rivers subsector

Project Type	Step	Definition	Performance Measures
River Project – Identification	NA	Assessments of potential floodplain/stream restoration areas to identify locations with the highest levels of erosion, nutrient, and sediment pollution, and/or habitat degradation. This work is done as a follow up to Stream Geomorphic Assessments. These assessments identify sites where stream/river restoration projects will be most beneficial to restore the stream/river to least erosive form over time (i.e., equilibrium condition) and improve habitat. Work includes project development and prioritization to target cost effective actions.	Stream miles assessed/covered by plan Number of projects identified
Stream Geomorphic Assessment Phase 1	NA	Remote sensing assessment of rivers/streams at the watershed scale to divide rivers/streams into reaches and provide an initial review of stream reach condition.	Stream miles assessed/covered by plan
Stream Geomorphic Assessment Phase 2 (River Corridor Plan)	NA	Field based assessments of stream reaches to determine current geomorphic and habitat conditions and to determine potential management needs and strategies to restore stream to least erosive form over time (i.e., equilibrium). Could be done in conjunction with a Phase 1 Stream Geomorphic Assessment.	Stream miles assessed/covered by plan Number of projects identified

Project Type	Step	Definition	Performance Measures
Dam Removal – Identification	NA	Assessments of potential dam removal restoration sites to identify locations with impacts to longitudinal stream equilibrium, habitat degradation, and/or risk of dam failure leading to water quality impacts. This work is done outside of a Stream Geomorphic Assessment or River Corridor Planning process or as a follow up to that process. These assessments identify sites where dam restoration projects will be most beneficial in order to and restore the stream/river to least erosive form over time (i.e., equilibrium condition) and improve habitat. Work includes project development and prioritization to target cost effective actions.	Stream miles assessed/covered by plan Number of projects identified
Dam Removal – Preliminary Engineering Design	1	Preliminary determination of feasibility and design of a dam removal project to restore hydrologic connectivity of surface waters. Work includes determining landowner interest, site/design considerations, permitting needs, and overall suitability for implementing project. May involve feasibility or alternatives analysis.	Number of preliminary (30%) designs completed
Dam Removal – Final Engineering Design	2	Final design of dam removal project to restore hydrologic connectivity of surface waters. Work includes obtaining any permits required.	Number of final (100%) designs completed
Dam Removal – Implementation	3	Implementation of dam removal project to restore hydrologic connectivity of surface waters. Permit(s) and operation and maintenance plan agreement(s) are in place prior to construction.	Acres of floodplain restored Linear feet of stream restored Stream miles reconnected for stream equilibrium /aquatic organism passage
Floodplain/Stream Restoration – Preliminary Engineering Design	1	Preliminary determination of feasibility and design of stream/river and floodplain restoration projects to restore the stream/river to least erosive condition (i.e., equilibrium condition) and improve habitat. Restoration work includes channel/ floodplain modification to improve equilibrium dimensions/ connections OR removal/retrofit of river corridor/floodplain encroachments or instream structures. Work includes determining landowner interest, site/design considerations, permitting needs, and overall suitability for implementing project.	Number of preliminary (30%) designs completed
Floodplain/Stream Restoration – Final Engineering Design	2	Final design of stream/river and floodplain restoration projects to restore the stream/river to least erosive condition (i.e., equilibrium condition) and improve habitat. Restoration work includes channel/ floodplain modification to improve equilibrium dimensions/ connections OR removal/ retrofit of river corridor/ floodplain encroachments or instream structures. Work includes securing permit(s) and final operation and maintenance plan agreement(s).	Number of final (100%) designs completed

Project Type	Step	Definition	Performance Measures
Floodplain/Stream Restoration – Implementation	3	Implementation of stream/river and floodplain restoration projects to restore the stream/river to least erosive condition (i.e., equilibrium condition) and improve habitat. Restoration work includes channel/ floodplain modification to improve equilibrium dimensions/ connections OR removal/ retrofit of river corridor/ floodplain encroachments or instream structures. Permits and operation and maintenance plan agreement(s) are in place prior to implementation.	For floodplain restoration: Acres of floodplain reconnected/restored For stream restoration: Linear feet of stream restored For in-stream culvert work: Stream miles reconnected for stream equilibrium/aquatic organism passage For encroachment: Number of river corridor/ floodplain encroachments removed or retrofitted
River Corridor Easement – Design	2	Evaluation of potential river corridor easement projects identified in an assessment that will remediate river instability that is responsible for erosion conflicts, increased sediment and nutrient loading, and a reduction in river habitat. Work includes determining landowner interest, site/design considerations, and overall suitability for participation in the River Corridor Easement Program.	Acres of river corridor scoped for easement Number of projects identified
River Corridor Easement – Implementation	3	Protection in perpetuity of a high priority river corridor to allow for passive restoration of channel stability by allowing natural erosive forces of the river to establish its least erosive form over time (i.e., equilibrium condition). Requires implementation of land use practices promoting water quality and encouraging flood resilience: landowner sells channel management; no new structures/development can occur within the corridor; a 50-foot river buffer of native woody vegetation is established that moves with the river.	Acres of riparian corridor conserved Linear feet of riparian corridor conserved
River Corridor – Buffer Planting	3	Planting of buffer area along rivers/streams with trees and shrubs, resulting in an average minimum buffer width of 35-feet (300 stems per acre), planted with native woody vegetation whose location floats with the river. Buffer supports restoration of river corridor/floodplain, filters nutrient and sediment pollution from runoff, and provides habitat benefits.	Acres of riparian corridor buffer planted/restored Linear feet of riparian corridor buffer planted/restored

Table 7. CWIP eligible project types and definitions, standards, and mandatory performance measures for the natural resources sector wetlands subsector

Project Type	Step	Definition	Performance Measures
Wetland Restoration – Identification	NA	Assessments to identify priority wetlands and buffer areas for restoration and protection work to promote water quality benefit, encourage flood resiliency, and provide habitat benefits. Assessments involve project development and prioritization to target cost effective actions.	Acres assessed/covered by plan Number of projects identified
Wetland Restoration – Preliminary Engineering Design	1	Preliminary design of wetland and buffer area restoration and protection projects to promote water quality benefit, encourage flood resiliency, and provide habitat benefits. Work may include determining landowner/ municipal interest, site/design considerations, permit needs, and overall suitability for implementing project.	Number of preliminary (30%) designs completed
Wetland Restoration – Final Engineering Design	2	Final design of wetland and buffer area restoration and protection projects to promote water quality benefit, encourage flood resiliency, and provide habitat benefits. Work may include securing permit(s) and operation and maintenance plan agreements, and final stewardship agreement(s).	Number of final (100%) designs completed
Wetland Restoration – Implementation	3	Implementation of wetland and buffer area restoration and protection projects to promote water quality benefit, encourage flood resiliency, and provide habitat benefits.	Acres of wetland restored

Appendix C: Clean Water Initiative Program Eligible Project Types Standard Milestones and Deliverables

The Vermont Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP) has established standard milestones and deliverables based on project type and step (e.g., final design), organized alphabetically by sector and subsector in the following tables. Standard milestones and deliverables apply to all CWIP funding initiatives and are included in the scope of work of all grant/contract agreements. DEC-CWIP grant/contract recipients, including block grant administrators, are responsible for adhering to standard milestones and deliverables, including completion of final reporting requirements. Refer to the Vermont CWIP SFY 2021 Funding Policy Appendix B for corresponding eligible project types definitions and standards.

Standard milestones and deliverables are intended to: (1) standardize expectations for grant/contract recipients; (2) streamline the grant/contract agreement development process; (3) ensure projects progress as intended and achieve the desired outputs and outcomes; and (4) ensure project outputs and outcomes are captured and grant/contract recipients' efforts are acknowledged in the *Vermont Clean Water Initiative Annual Performance Report* and other communications supporting Vermont's clean water efforts.

CWIP may fund grants/contracts that result in completion of multiple projects, such as block grants. Standard milestones and deliverables must be followed for individual projects completed under a multi-project agreement. CWIP may fund other technical capacity building and technical development activities as needed to support clean water project prioritization, development, implementation, tracking, and accounting. Milestones and deliverables will be defined for other technical activities as needed, building on baseline milestones and deliverables shown in Table 9.

List of Tables

Table 1. CWIP eligible project types and mandatory standard milestones and deliverables for the agriculture sector

Agriculture Project Types	Milestones	Deliverables
Agricultural Pollution Prevention – Project Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site locations and boundaries identified	Locator maps[1] of identified problem area(s) and narrative on how areas were identified
	Water quality improvement needs and objectives identified	Project summaries with water quality improvement needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Assessment complete	Final Assessment Report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Agricultural Pollution Prevention – Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator maps[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs	Project summaries that identify site/design considerations, permitting needs, and water quality improvement objectives and goals
	Determination of operation and maintenance (O&M) responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Agricultural Pollution Prevention – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Required permits secured (if applicable)	Permit documentation (if applicable)
	Implementation update(s); Clean Water Project Sign has been installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos including photo of Clean Water Project Sign[4], if applicable)
	Agricultural best management practice(s) (BMPs) implemented	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; press release; post-implementation photo(s); Form 430-M

Table 2. CWIP eligible project types and mandatory standard milestones and deliverables for the developed lands sector roads subsector

Road Project Types	Milestones	Deliverables
Road Erosion Inventory	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Road network and boundaries identified, or site locations and boundaries identified	Map of segmented road network and GIS-determined hydrologically connected road segments identified
	Road erosion inventory methodology and standards established (if applicable)	Road erosion inventory methodology and standards and prioritization criteria; use Municipal Roads General Permit (MRGP) road erosion inventory methodology for municipal roads and adapt/adopt MRGP inventory with DEC approval for non-municipal road networks
	Hydrologically connected road segments inventoried	Field inventory of hydrologically connected road segments determining segments that do not, partially, and fully meet standards
	Road segments not/partially meeting standards prioritized	Implementation table of prioritized road segments requiring water quality improvements, including best management practices necessary to bring road segments into fully meeting standards and associated cost estimates
	Road Erosion Inventory complete	Final Road Erosion Inventory (includes synthesis from prior completed project deliverables); Submit Road Erosion Inventory data to DEC (municipal road data must be submitted via the MRGP Portal)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Road Project – Project Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site locations and boundaries identified	Locator map(s)[1] of identified problem area(s) and narrative on how areas were identified
	Restoration needs and objectives identified	Project summaries with restoration needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Final assessment complete	Final Assessment Report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Road Project – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator map[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs	Project summaries that identify site/design considerations, permitting needs, and water quality improvement objectives and goals
	30% design complete	Preliminary Design Final Report (includes synthesis of prior completed project deliverables, 30% designs, written landowner commitment to next project step, and cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Road Project – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator map[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Road Project – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation

Road Project Types	Milestones	Deliverables
	Required permits secured (if applicable)	Permit documentation (if applicable)
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Road BMP(s) implemented	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; Municipal Roads Grants-in-Aid Final Performance Report[6] (BMP and/or equipment); press release; post-implementation photo(s); Form 430-M
Stormwater/Road Equipment	Project initiated; purchase of equipment	Invoice for equipment purchase
	Cooperative agreement developed (if applicable); O&M plan created and signed	Signed cooperative agreement (if applicable); signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; press release; photo(s) showing equipment in use; Transfer of Ownership Request letter[6]; Form 430-M

Table 3. CWIP eligible project types and mandatory standard milestones and deliverables for the developed lands sector stormwater subsector

Stormwater Project Types	Milestones	Deliverables
Stormwater Utility Development	Identify legal authority for utility creation	Relevant state statute and local statutes, Selectboard approval, Town Attorney opinion
	Identify revenue requirements	Summary report of stormwater management costs to be covered by utility
	Rate structure development	Memo on recommended rate structure
	Public outreach summary and final rate structure	Summary of public outreach effort, public comments, and response summary
	Utility database development	Subcontractor report on new or modified existing utility billing system with testing
	Adoption of utility and rate structure	Selectboard decision on SW Utility budget and rate structure
Stormwater – IDDE	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Data acquisition and review initiated	Initial survey and advanced investigation; itemized cost list with documentation on methods used
	Data acquisition and review completed	Interim table of outfall monitoring results
	IDDE assessment completed	Final report summarizing problems found, status of problems found, recommended actions, data tables, problem area maps, and cost-estimates
	Project complete	Final Performance Report[3]; press release; Form 430-M
Stormwater Master Plan	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Data acquisition and review completed	Locator map(s)[1]; documentation of data gaps; data library
	Existing condition water quality improvement needs and objectives identified	Documentation of problem areas with locator maps[1] and site photo(s)
	Project prioritization completed	Prioritized project list completed using unified scoring matrix for Stormwater Master Plans[7]
	Meeting(s) with stakeholders held	Summary of meeting(s)
	Restoration plans developed for a subset of prioritized projects	Restoration plans of prioritized projects including preliminary (30%) engineering designs and cost estimates
	Stormwater Master Plan completed	Stormwater Master Plan (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified

Stormwater Project Types	Milestones	Deliverables
	Project complete	Final Performance Report[3]; Stormwater BMP Report[8] for each 30% design; press release; Form 430-M
Stormwater – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator map[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs	Project summaries that identify site/design considerations, permitting needs, and water quality improvement objectives and goals
	30% design complete	Preliminary Design Final Report (includes synthesis of prior completed project deliverables, 30% designs, written landowner commitment to next project step, and cost-estimate)
	Project complete	Final Performance Report[3]; Stormwater BMP Report[8] for each 30% design completed; press release; Form 430-M
Stormwater – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator map[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate with a level of effort document)
	Project complete	Final Performance Report[3]; Stormwater BMP Report[8] (indicate BMP status as designed); press release; Form 430-M
Operational Stormwater Permit Obtainment	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Identified site/design considerations	Locator map(s)[1] with site photos; letter of landowner commitment; project summaries that identify site/design considerations, natural resource constraints, water quality improvement objectives/goals, and natural resource constraints per the Engineering Feasibility Analysis criteria, including the existence of contaminated soil or groundwater
	Determination of additional required permits (e.g., wetland, floodplain) and preliminary review of feasibility of obtaining required permits	Documentation of additional required permits for project implementation (include indication of potential challenges/conflicts for obtaining permit)
	30% design complete (if applicable, depending on prior design work completed for project)	Preliminary Design Report (includes synthesis of prior completed project deliverables, 30% designs, cost-estimates, and nutrient (and flow, if applicable) reduction estimates using STP Calculator)
	60% design complete (if applicable, depending on prior design work completed for project)	Intermediate Design Report (includes synthesis of prior completed project deliverables, 60% designs, cost-estimates, and nutrient (and flow, if applicable) reduction estimates using STP Calculator)
	Meeting(s) with landowner and other stakeholders to discuss planned projects and potential co-benefits (if applicable)	Summary of meeting(s), including meeting outcomes, planned actions, and potential co-benefits
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented; draft DEC Operation and Maintenance Plan and Agreement[5]
	100% design complete (if applicable, depending on prior design work completed for project)	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate with a level-of-effort document)
	Submission of permit application documentation to DEC Stormwater Program	Completed application, site plans, and engineering feasibility analyses

Stormwater Project Types	Milestones	Deliverables
	Project complete; permit obtained	Final Performance Report[3]; press release; Form 430-M; documentation of permit obtained
Stormwater – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Contractor selected (if applicable)	Signed contract; statement of reasoning for contractor selection (if applicable)
	Required permits secured (if applicable)	Permit documentation (if applicable)
	Implementation update(s); BMP(s) implemented, Clean Water Project Sign installed during construction if the project is considered publicly visible	Interim report(s) (includes summary of work to date, percent progress, construction photos, including Clean Water Project Sign[4] photo, if applicable)
	Stormwater BMP(s) implemented	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; Stormwater BMP Report[8] (indicate BMP status as constructed); press release; post-implementation photo(s); Form 430-M

Table 4. CWIP eligible project types and mandatory standard milestones and deliverables for the natural resources sector forestry subsector

Forestry Project Types	Milestones	Deliverables
Forestry – Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site locations and boundaries identified	Locator maps[1] of identified problem area(s) and narrative on how areas were identified
	Water quality improvement needs and objectives identified	Project summaries with water quality improvement needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Assessment complete	Final Assessment Report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Forestry – Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator maps[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs	Project summaries that identify site/design considerations, permitting needs, and water quality improvement needs and objectives
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement, and final cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Forestry – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Forestry acceptable management practice(s) implemented	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]

	Project complete	Final Performance Report[3]; press release; post-implementation photo(s); Form 430-M
Forestry – Equipment	Project initiated; purchase of equipment	Invoice for equipment purchase
	Forester cooperative agreement developed (if applicable); O&M plan created and signed	Signed cooperative agreement (if applicable); signed 10-year minimum O&M plan
	Project complete	Final Performance Report[3]; press release; photo(s) showing equipment in use; Transfer of Ownership Request letter[8]; Form 430-M

Table 5. CWIP eligible project types and mandatory standard milestones and deliverables for the natural resources sector lakes subsector

Lake Project Types	Milestones	Deliverables
Lake Wise Master Planning	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Kickoff meeting with stakeholders (e.g., lake association)	Meeting minutes including date and number in attendance
	Site locations and boundaries for evaluation identified	Locator maps[1] of identified problem area(s) and narrative on how areas were identified; summary of landowner involvement
	Lake Wise assessments complete	Summary of Lake Wise results and awards given with restoration/water quality improvement needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Lake Wise Master Plan complete	Lake Wise Master Plan report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Lake Watershed Action Planning	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Kickoff meeting with stakeholders (e.g., lake association)	Meeting minutes including date and number in attendance
	Site locations and boundaries for evaluation identified	Locator maps[1] of identified problem area(s) and narrative on how areas were identified; summary of landowner involvement
	Lake watershed assessment complete	Summary report including sites assessed, potential water quality threats identified and ranked, site maps developed, and mitigation strategies identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Meeting(s) with stakeholders to review project prioritization	Summary of meeting(s)
	Restoration plans developed for a subset of prioritized projects	Restoration plans of prioritized projects including preliminary (30%) engineering designs and cost estimates
	Lake Watershed Action Plan complete	Lake Watershed Action Plan (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Lake Shoreland – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Identified site/design considerations and permitting needs	Locator maps[1] with site photo(s); project summaries that identify site/design considerations, permitting needs, and restoration/water quality improvement objectives and goals
	30% design complete	Preliminary Design Final Report (includes synthesis from prior completed project deliverables, 30% designs, written landowner commitment to next project step, and cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M

Lake Project Types	Milestones	Deliverables
Lake Shoreland – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator maps[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Lake Shoreland – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Required permits secured (if applicable)	Permit documentation (if applicable)
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Lake shoreland restoration completed	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5] (including timing and completion of plant protection removal if applicable)
	Project complete	Final Performance Report[3]; Riparian Buffer Planting BMP Report[9] (if applicable); Stormwater BMP Report[10] (if applicable); press release; post-implementation photo(s); Form 430-M

Table 6. CWIP eligible project types and mandatory standard milestones and deliverables for the natural resources sector rivers subsector

River Project Types	Milestones	Deliverables
River Project – Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site locations and boundaries identified	Locator maps[1] of identified problem area(s) and narrative on how areas were identified
	Restoration/water quality improvement needs and objectives identified	Project summaries with restoration/water quality improvement needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Assessment complete	Final Assessment Report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Stream Geomorphic Assessment (SGA) Phase 1	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Baseline data created including stream reach breaks, meander center lines, and valley walls; Stream Geomorphic Assessment Tool run	Electronic Stream Geomorphic Assessment Tool GIS project
	Data entered to the DEC SGA data management system	Notification of data entry to DEC SGA data management system
	Quality assurance check complete	Quality assurance report from database
	Phase 1 SGA complete	Final SGA Phase 1 Report (includes synthesis from prior completed project deliverables)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Stream Geomorphic Assessment (SGA) Phase 2	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)

River Project Types	Milestones	Deliverables
(River Corridor Plan)	Steering committee established; Project identification meeting held (if applicable)	Minutes and list of attendees from steering committee meeting; table of projects identified following Rivers Program-provided template
	Reaches selected from SGA Phase 1; landowner permission obtained	Report on reach prioritization method and landowner contact
	Field work completed; data entered to DEC SGA system	Verification of data entry to DEC SGA data management system
	Quality assurance check complete	Quality assurance report from database
	River Corridor Plan drafted; prioritized projects (if applicable)	Draft River Corridor Plan including minimum of five project packets with cost-estimates and landowner commitment to next project steps
	Phase 2 SGA River Corridor Plan complete	Final SGA Phase 2 River Corridor Plan report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Dam Removal – Project Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site visit and planning meeting; site location and boundaries identified	Meeting notes; locator maps[1] of identified project area(s); narrative of how areas were identified
	Water quality improvement needs and objectives identified	Project summaries with water quality improvement needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Preliminary site development report completed	Preliminary site development report (includes documentation of site history and current state (e.g., dam design and/or as-built plans, past ownership documentation, current land ownership documentation), identification of impacts to natural resources (e.g., identification of rare or endangered species, map of invasive species present), potential site constraints (e.g., right of way, historic preservation), and permitting contacts)
	Project complete	Final Performance Report[3]; Batch Import File[2]; press release; Form 430-M
Dam Removal – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Feasibility/alternatives analysis completed; identified permitting needs; pre-permitting meeting	Feasibility/alternatives analysis report (includes list of permitting needs, water draw down needs and methods, site constraints (e.g., site access location considerations, access easement needs), needs and methods to address impacts to natural resources (e.g., rare or endangered species, invasive species))
	Design concepts completed	Design concepts report including updated conceptual site plan, design criteria for all aspects of the design, and construction cost-estimates
	Stakeholder community meeting (if applicable)	Meeting notes, appropriate agreements (landowner /town) for moving forward
	Check-in and approval for topographic and boundary survey; geotechnical report	Report of the topographic and boundary survey; geotechnical report if determined to be applicable or description of why these are not applicable[11]
	30% design complete	Preliminary Design Final Report (includes synthesis of prior completed project deliverables, 30% design, written landowner commitment to next project step, and cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Dam Removal – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator map[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	60% design complete	Intermediate Design Report (includes synthesis of prior completed project deliverables and updates based on review of 30% design review and permitting considerations, 60% design, written landowner commitment to next project step, and cost-estimate)

River Project Types	Milestones	Deliverables
	90% design complete (if applicable)	Intermediate Design Report (includes synthesis of prior completed project deliverables, 90% designs, written landowner commitment to implement project, and final cost-estimate, if applicable)
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Required permits secured	Permit documentation
	Project complete	Final Performance Report[3]; press release; Form 430-M
Dam Removal – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo of site pre-implementation
	Verification of permits secured	Permit documentation
	Pre-construction kick-off meeting	Site visit, walk through of the site with plans, evaluate any needs/issues/considerations for plan adjustments; documentation of meeting and any notes for plan updates
	Final construction walkthrough	Site visit notes, finalized construction notes for any design/plan updates
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Dam removed; restoration work completed	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; press release; post-implementation photo; Form 430-M
Floodplain/Stream Restoration – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator map[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs; pre-permitting meeting	Project summaries that identify site/design considerations, permitting needs, and restoration/water quality improvement objectives and needs (includes field survey completed with GIS-based map and cross-section locations); list of likely permits and initial review of permitting needs
	30% design complete	Preliminary Design Final Report (includes alternatives analysis summary, synthesis of prior completed project deliverables, 30% designs, written landowner commitment to next project step, and cost- estimates)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Floodplain/Stream Restoration – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator map[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	60% design complete	Intermediate Design Report (includes synthesis of prior completed project deliverables and updates based on review of 30% design review and permitting considerations, 60% design[4], written landowner commitment to next project step, and cost-estimate)
	90% design complete (if applicable)	Intermediate Design Report (includes synthesis of prior completed project deliverables, 90% designs, written landowner commitment to implement project, and cost-estimate)
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Required permits secured	Permit documentation
	Project complete	Final Performance Report[3]; press release; Form 430-M

River Project Types	Milestones	Deliverables
Floodplain/Stream Restoration – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Pre-construction kick-off meeting	Site visit, walk through of the site with plans, evaluate any needs/issues/considerations for plan adjustments; documentation of meeting and any notes for plan updates
	Final construction walkthrough	Site visit notes, finalized construction notes for any design/plan updates
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Floodplain/stream restoration project(s) implemented	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; Riparian Buffer Planting BMP Report[7], if applicable; press release; post-implementation photo(s); Form 430-M
River Corridor Easement – Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator map[1] with site photo(s); summary of landowner contact
	Site plan; conservation documents drafted	GIS site plan; copy of draft conservation documents
	Landowner negotiations completed	Report of landowner negotiations, including commitment to implementation and cost-estimate
	Town approval received (if applicable)	Letter from town supporting project
	Final draft agreement for easement completed	Final draft agreement for easement
	Project complete	Final Performance Report[3]; press release; Form 430-M
River Corridor Easement – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	purchase and sales agreement signed	Signed purchase and sales agreement
	Property title search and insurance completed	Title report
	Property survey completed	Property survey (paper and electronic)
	Easement closed, and long-term monitoring plan developed	Copy of all legally filed documents signed by the grantee and landowner; MOU for stewarding river corridor easements between grantee and DEC; copy of easement with DEC as a third-party beneficiary
	Stewardship agreement created and signed	Signed stewardship agreement
	Project complete	Final Performance Report[3]; press release; post-implementation photo(s); Form 430-M
River Corridor – Buffer Planting	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Site constraints identified	Locator map(s)[1] with pre-implementation site photo(s); site descriptions with constraints listed
	Developed planting plan; secured landowner agreements with signed O&M plans	Planting plan (including species type, number, and estimated cost) in accordance with SGA or River Corridor Planning recommendations (if available); signed landowner agreement(s) with 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including photo of Clean Water Project Sign[4], if applicable)
	Buffer restoration planting completed	
	Project complete	Final Performance Report[3]; Riparian Buffer Planting BMP Report[7]; final planting plans (including species list and count); press release; post-implementation photo(s); Form 430-M

Table 7. CWIP eligible project types and mandatory standard milestones and deliverables for the natural resources sector wetlands subsector

Wetland Project Types	Milestones	Deliverables
Wetland Restoration – Identification	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Site locations and boundaries identified	Locator map[1] of identified problem area(s) and narrative on how areas were identified
	Restoration needs and objectives identified	Project summaries with restoration needs and objectives identified
	Prioritization criteria developed; project prioritization completed	List of criteria used for prioritization (must include level of landowner commitment); prioritized project list
	Assessment completed	Final Assessment Report (includes synthesis from prior completed project deliverables); Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Final Performance Report[3]; press release; Form 430-M
Wetland Restoration – Preliminary Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Ownership of site(s) identified	Locator map[1] with site photo(s); summary of landowner contact
	Identified site/design considerations and permitting needs	Project summaries that identify site/design considerations, permitting needs, and restoration objectives and goals
	30% design complete	Preliminary Design Final Report (includes synthesis of prior completed project deliverables, 30% designs, written landowner commitment to next project step, and cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Wetland Restoration – Final Engineering Design	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable)
	Determination of required permits	Documentation of required permits for project implementation, indicating potential challenges/conflicts for obtaining permit (if applicable) and project locator map[1]
	Determination of O&M responsible party	Documentation of O&M responsible party once project is implemented
	100% design complete	Final Design Report (includes synthesis of prior completed project deliverables, 100% designs, written landowner commitment to implement project, and final cost-estimate)
	Project complete	Final Performance Report[3]; press release; Form 430-M
Wetland Restoration – Implementation	Project initiated; RFP issued and contractor selected (if applicable)	Copy of RFP, signed contract, and statement of reasoning for contractor selection (if applicable); photo(s) of site(s) pre-implementation
	Required permits secured (if applicable)	Permit documentation (if applicable)
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including Clean Water Project Sign[4] photo, if applicable)
	Wetland restoration complete	
	O&M plan created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Final Performance Report[3]; press release; post-implementation photo(s); Form 430-M

Table 8. CWIP block grant types and mandatory standard milestones and deliverables (Note: Individual projects completed under block grants must follow milestones and deliverables based on the individual project type)

Block Grant Types	Milestones	Deliverables
Note: Individual projects completed under block grants must follow milestones and deliverables based on the individual project type		
Woody Buffer Block Grants	Project initiated; sub-grantees approved; submit projects for DEC approval according to grant agreement	Sub-grantee approvals; project summaries, including site descriptions and locator maps[1]; photo(s) of site(s) pre-implementation
	Implementation projects approved	Batch Import File[2] for projects not in the Watershed Projects Database
	Report on developed planting plans; signed landowner agreements	Planting plans (including species type, number, and estimated cost); signed landowner agreement(s) with signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Implementation update(s); Clean Water Project Sign installed during planting if the project is considered publicly visible	Interim report(s) (includes summary of work to date on each individual project, percent progress, and planting photos, including Clean Water Project Sign[4] photo, if applicable)
	Project complete	Block Grant Final Performance Report[12]; press release; post-implementation photo(s); Form 430-M
Work Crew Block Grants	Project initiated; sub-grantees approved; submit projects for DEC approval according to grant agreement	Sub-grantee approvals; project summaries, including site descriptions and locator maps[1]; photo(s) of site(s) pre-implementation
	Implementation projects approved	Batch Import File[2] for projects not in the Watershed Projects Database
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible.	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including Clean Water Project Sign[4] photo, if applicable)
	Report on developed implementation plans; signed landowner agreements	Implementation plans; signed landowner agreement(s) with signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5]
	Project complete	Block Grant Final Performance Report[12]; press release; post-implementation photo(s); Form 430-M
Partnership Project Development Block Grants	Project initiated; sub-grantees approved; preliminary projects identified	Sub-grantee approvals; preliminary list of projects and narrative on how projects were identified
	Development projects prioritized and approved	Project summaries with restoration needs and objectives identified; list of criteria used for prioritization; prioritized project list
	Project development update(s)	Interim report with update on status of projects in development
	Project development complete	Final Assessment Report; Batch Import File[2]; locator maps[1] of projects identified
	Project complete	Block Grant Final Performance Report[12]; press release; post-implementation photo(s); Form 430-M
Design and Implementation Block Grant	Project initiated; sub-grantees approved; preliminary projects identified	Sub-grantee approvals; preliminary list of projects and narrative on how projects were identified
	Projects prioritized and approved	Project summaries with restoration needs and objectives identified; list of criteria used for prioritization; prioritized project list
	Implementation update(s); Clean Water Project Sign installed during construction if the project is considered publicly visible	Interim report(s) (includes summary of work to date, percent progress, and construction photos, including Clean Water Project Sign[4] photo, if applicable)
	O&M plans created and signed	Signed 10-year (minimum) DEC Operation and Maintenance Plan and Agreement[5] for each project implemented
	Project complete	Block Grant Final Performance Report[12]; press release; post-implementation photo(s); Form 430-M

Table 9. CWIP standard milestones and deliverables for other technical activities not addressed in categories listed above (Note: Additional milestones and deliverables may be defined for other technical activities as needed, building on baseline milestones and deliverables shown below)

Other Project Types	Milestones	Deliverables
Other Technical Activities	Project initiated; gather and review data/information	Project scoping report, including data/information gathered
	Project update(s)	Interim report(s) and/or presentation(s)
	Project complete	Final Performance Report[3]; technical final report

Endnotes

[1] Grantees/contractors are required to submit locator maps for each project identified under an assessment or planning grant. Locator maps must be created using the ANR Atlas Clean Water Initiative Program Grant Screening Layer (http://anrmaps.vermont.gov/websites/anra5//), which identifies potential natural resource conflicts and permitting needs for a given area. Project locator maps should be downloaded from the Atlas for each project identified in the BIF (described above), and the maps should be submitted to DEC as a PDF. Please see the Application Manual, Appendix 1, for instructions on how to create project locator maps, available at: https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/manual_appendix1.pdf.

[2] The batch import file (BIF) is a required deliverable for assessment or planning grants resulting in project identification. All projects identified and prioritized are required to be entered into the BIF. The BIF is used to incorporate "proposed" projects into Vermont Tactical Basin Plan Implementation Tables in the Watershed Projects Database (WPD). The most recent version of the BIF is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[3] The Final Performance Report is the required final deliverable for each Clean Water Initiative Program grant/contract agreement. The information provided in this report is used for annual reporting to the Vermont State Legislature and US EPA. Templates are provided in Attachment E in all agreements. The Final Performance Report is also available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[4] Clean Water Project signs are required on publicly visible implementation projects, if stated in the grant agreement and the project meets the requirements. Signs should be posted during project construction if the duration of project construction is at least two weeks or if duration of construction is less than two weeks, but the value of the project warrants signage. Signs cannot be posted in areas that may cause traffic hazards and must be located outside road right-of-way. A photo of the sign in place should be submitted with the deliverables. Further information is available at: https://dec.vermont.gov/sites/dec/files/DEC-CWIP_CleanWaterProjectSignsGuidance_FINAL.pdf.

[5] The DEC Operation and Maintenance (O&M) Plan and Agreement is a required form for implementation projects receiving Clean Water Initiative Program funds. The DEC O&M Plan and Agreement template is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[6] The Municipal Roads Grants-in-Aid Final Performance Report is a required final deliverable for projects involving or supporting the installation of road erosion control BMPs. The form is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources#ERP.

[7] The Unified Scoring Prioritization Matrix for Stormwater Master Plans (SWMPs) must be used when ranking projects within SWMPs. Guidance is available at: https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/SWMP%20Unified%20Matrix_Final.pdf.

[8] The Transfer of Ownership request letter allows a grantee to take ownership of an equipment purchase. The template is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[9] The Riparian Buffer Planting BMP Report is a required final deliverable for all projects with riparian buffer plantings. The information provided in this report allows DEC to estimate phosphorus pollutant reductions from buffer plantings. The most recent version is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[10] The Stormwater BMP Report is a required final deliverable for all projects implementing or designing stormwater BMPs. The information provided in this report allows DEC to estimate phosphorus pollutant reductions from stormwater BMPs. The most recent version is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.

[11] If both the grant manager and the engineer agree that topographic and boundary surveys and/or a geotechnical report are not necessary due to the nature of the dam removal location, please provide a justification why they are not necessary. Grantee will not be paid for this deliverable if surveys were not competed.

[12] The Block Grant Final Performance Report is an Excel-based reporting template designed for reporting on multiple completed projects at once. The template centralizes the Final Performance Report, Stormwater BMP Report, and Buffer Planting BMP Report for block grants. The file is available at: https://dec.vermont.gov/water-investment/cwi/grants/resources.