

Clean Water Guidance Document
Chapter 6 – Clean Water Projects (with references to Act 76 and CWSP Rule)
Final Draft – February 10, 2023
Version 6.0

Chapter 6. PROJECT ELIGIBILITY, SCREENING, PRIORITIZATION, AND SELECTION

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1) Introduction

This Chapter of Guidance focuses on clean water projects and funded by Water Quality Restoration Formula Grants within the context of Vermont’s Act 76 of 2019. This chapter provides guidance to CWSPs, BWQCs, project implementers, landowners, stakeholders, and the public on the advancement of a project concept towards implementation, together with other relevant topics. More specifically, this chapter includes guidance on the roles and responsibilities of various parties related to project eligibility, prioritization, co-benefits, selection, project advancement, and implementation, .

2) Purpose and Intended Use

This chapter provides guidance on how to solicit, prioritize, and select proposals for the identification, development, design, and implementation of voluntary clean water projects. Guidance is provided for CWSPs consistent with Act 76. This chapter should not be read in isolation.

The following narrative is intended for CWSPs, BWQCs and project implementers as guidance for Clean Water (CW) project screening for project eligibility in order to facilitate project advancement steps from development through design up to implementation. Note that there are separate Guidance chapters on CW project operation and maintenance and for project data management. Project advancement is defined as the movement of a project from one phase to the next within the Formula Grant funding system. It presumes the project has already been screened for eligibility, prioritized and selected for funding and is now approved for design leading to implementation.

This section of Guidance does not yet apply to proposals to support project identification through assessments/planning, or to support project development. CWSPs must follow a separate section of Guidance on project identification and development activities. As more of project identification and development activities are funded via Formula Grants additional guidance will be presented as an addendum to this chapter.

The CWSP and BWQC should be familiar with relevant (Vermont) surface water management guiding documents and consider projects within the context of the policies and framework established by those documents, which include the relevant [Tactical Basin Plans](#), the [Champlain](#) and [Memphremagog](#) TMDLs, Vermont's Non-Point Source Management Program Plan (2021-2025), the FY23 [Clean Water Initiative Program Funding Policy](#), the state's [Surface Water Management Strategy](#), and other relevant [surface water quality management plans](#) and policies. The outcomes of relevant sector-based assessments, including but not limited to Stream Geomorphic Assessments / River Corridor Plans, Lake Watershed Actions Plans / Lakewise assessments, Stormwater Master plans, and the outcomes from other state sanctioned assessments can inform potential project development opportunities. *How* a project meets or conforms with eligible clean water project types and water quality best practices is a function of both the qualitative elements of a project as well as a quantitative assessment, such as is conducted per a stormwater treatment practice calculator..

Until a project has advanced to either preliminary or final design, there may not be sufficient information to determine eligibility, project viability or pollutant reduction potential. As such, this chapter of guidance applies primarily to projects requesting funds for 30% design¹ onward.

¹ The reference to 30% design is an analog to preliminary design, where elements of the project conceptual design can inform the subsequent project steps for final design leading to implementation. For most project types, the CWIP distinguishes between a preliminary (30%) design phase and a final (100%) design phase, with the assumption that

However, there are project types for which a 30% design is not required as part of project advancement (e.g., buffer plantings), and where some analog to the 30% design may be used as a proxy for review and selection.

3) Project Solicitation

Reference to the CWSP Rule - § 39-403. Clean Water Projects.

(b) On a schedule determined by the CWSP, and in consultation with the BWQC, the CWSP shall conduct an open process to solicit clean water projects for development and implementation in the basin.

Project solicitation, as required by § 39-403, is a critical step in bringing projects in front of the CWSP and BWQC. Project proponents who respond to project solicitation requests are best suited to speak to a project’s current status, readiness, and feasibility, and project managers are likely to have fostered the necessary landowner relationships to secure their willingness to participate in these voluntary projects. The DEC Watershed Projects Database (WPD) houses a suite of potential projects, but this should not be relied on as the sole source for “finding projects” as not all WPD projects are well suited or eligible for Formula Grants or have an accurate current status. Status gaps in WPD can include information on a project’s current phase, funding levels, partner involvement, permit needs, landowner willingness, and feasibility.

Prior to soliciting projects, each CWSP, in consultation with their BWQC, should develop an annual project solicitation schedule. Each CWSP may decide the frequency, timing, and project type focus of these solicitation rounds, as well as how much of their fund allocation to dedicate to each solicitation round. Close coordination of these decisions with the BWQC will ensure a smooth and productive solicitation process. CWSPs and BWQCs are encouraged to coordinate across basins with other CWSP/BWQCs and DEC Funding Program Administrators to align or complement solicitation schedules, materials, and templates.

Project solicitations should be advertised broadly. Project solicitation materials may be designed as the CWSP sees fit to gather sufficient information to assist with determining project eligibility and prioritization. The CWIP Project Eligibility Screening Form is a required component per the CWIP Funding Policy, but other project information may also be helpful such as projected pollution reduction, proposed budget and projected operation and maintenance costs. If a CWSP is proposing a project CWSP staff will need to complete the same solicitation materials as external project proponents.

more complex projects will require at least both of these phases, and that simpler projects may only require 100% design or no design at all. In most cases “design” is an iterative process involving one or more rounds of review and stakeholder engagement to ensure feasibility concerns initially identified during development phase are adequately addressed and no new feasibility concerns have arisen.

The Rule contemplates a few ways that project solicitation can occur and projects can arrive in front of the CWSP for eligibility screening. This includes a) through a granting round and b) through a bifurcated project solicitation/procurement process.

Each is described further below.

a) Granting and Sub granting

Reference to the CWSP Rule - § 39-303 subgrants, consistent with the Secretary's guidance pursuant to § 39-304(e), that establishes a policy for how the CWSP will issue subgrants to other organizations in the basin, giving due consideration to the expertise of those organizations and other requirements for the administration of the grant program. The subgrant guidance shall include a policy and procedures for subgrantees and subcontractors for certification of debarment status and for Certificate of Good Standing requirements, including how the CWSP will audit these requirements.

CWSPs shall establish a policy for how they will issue subgrants through a granting round. A granting round is considered the primary mechanism by which the CWSP will solicit project proposals from eligible grant subrecipients. Grants are commonly issued to organizations that perform public benefit activities with a high degree of independence. Grantees often adhere to programmatic requirements of the state program under which the grant is issued (e.g., this guidance document and the CWIP Funding Policy) and are required to submit financial, programmatic and/or performance reports to the Granting Agency.² CWSPs are encouraged to use Agency of Administration [Bulletin #5](#) for guidance on the appropriate use for grants. If holding an open granting round, CWSPs should refer to the CWIP Funding Policy as a guide to determine eligible subgrant recipients.

In a granting round, when projects are selected by the BWQC, the entity that proposed the project is simultaneously selected to receive the subgrant and perform the project management duties, so long as they meet the grant recipient eligibility requirements enumerated in the CWIP Funding Policy. As such BWQC members should be wary of any perceived or actual conflicts of interest in project selection. See Guidance Chapter 3 for more information. If the BWQC believes that the entity who brought the project forward cannot facilitate project completion, then the BWQC may choose not to select the project or the CWSP may offer to assist the project applicant as they manage the project.

Note that sometimes a project may come to a CWSP via a granting round performed by an external CWIP Funding Program Administrator. For example, CWIP's Water Quality Enhancement Grants Funding Program Administrators are instructed to discuss project proposals that are a "better fit" for, and that have access to, Water Quality Restoration Formula grant funding with the

² For more information on grants please see the Vermont Agency of Administration's Bulletin 5: https://aoa.vermont.gov/sites/aoa/files/Bulletins/Bulletin_5_eff12-26-14.pdf

applicable Clean Water Service Provider to determine whether the Funding Program Administrator(s) should proceed with considering funding the proposal with Water Quality Enhancement Grant funds. A project may be a “better fit” for Water Quality Restoration Formula grant funding if its projected phosphorus reduction cost-effectiveness falls at or above the applicable CWSP/BWQC’s cost-effectiveness threshold, if known.³ Project proposals received from Water Quality Enhancement Grants Funding Program Administrators should be pooled with other proposals received in a subsequent CWSP granting round. The CWSP may request additional information from these project proponents should their initial Water Quality Enhancement grant applications be missing information pertinent to CWSP/BWQC eligibility and priority decision-making.

b) Project Solicitation and/or Procurement

While the Rule specifically mentions granting, it does not preclude the CWSP from contracting services to support implementation of clean water projects as needed to meet targets that are not being met through grant rounds. Additionally, if the nature of the resulting relationship is better suited for a subcontract as opposed to a subgrant CWSPs will need to solicit those projects outside of a granting round. CWSPs are encouraged to use State of Vermont Agency of Administration Guidance⁴ to determine the best agreement vehicle based on the projected substance of the relationship.

In a bifurcated project solicitation/procurement process, the CWSP first solicits full project proposals from project proponents, clearly stating it is not a granting round. After eligible projects have been reviewed, prioritized, and selected by the CWSP and BWQC, the CWSP then engages in procurement of services to perform a specific suite of activities under each project’s scope of work. In this bifurcated system, project selection is not the same as a commitment to fund the specific project proponent to complete the proposed scope of work. When projects are selected, the entity that proposed the project must still competitively bid (if interested) to perform the work as part of a CWSP’s procurement activities. Please see Guidance Chapter 3 for more information on CWSP procurement.

Note that CWSPs and BWQCs may also choose to just release a Request for Information or RFI on potential projects. RFIs are not considered project solicitation activities since it is not expected that a grant or contract will result from the RFI. As such, RFIs can request less detailed information than a formal project solicitation round.

³ After a few project selection rounds Clean Water Service Providers (CWSP) and their Basin Water Quality Councils are strongly encouraged to identify and publicize a minimum acceptable phosphorus reduction cost effectiveness for projects they are willing to entertain. This would be called their “cost-effectiveness threshold.” See the “Pollution reduction cost effectiveness in the context of project ranking” section below for more details.

⁴ For more information on contracts please see the Vermont Agency of Administration’s Bulletin 3.5: <https://aoa.vermont.gov/sites/aoa/files/Bulletins/3point5/3.5Rewrite121619FINAL.pdf>.

Once project design and implementation proposals have been received, the CWSP (in coordination with the BWQC) must, based on the guidance provided below, 1) screen proposals to confirm they are *eligible* to receive Water Quality Restoration Formula Grant funds, 2) rank and prioritize the *eligible* proposals and 3) select proposals for funding. These steps are further outlined below.

4) Screening for Project Eligibility

§ 39-403. Clean Water Projects. (d) When identifying, prioritizing, and selecting clean water projects to meet a basin's pollutant reduction target, the CWSP and BWQC shall... (2) consult with the Secretary to determine project eligibility before scoring and ranking projects.

According to § 39-403, CWSPs must “(2) consult with the Secretary to determine project eligibility before scoring and ranking projects.” So long as CWSPs are ensuring proposed projects meet the eligibility criteria listed below, this can suffice for consultation with the Secretary. DEC staff are available, however, to help CWSPs make a determination for any unclear or questionable projects. CWSPs should consult with their Technical Project Manager for assistance in eligibility determinations as needed.

To be eligible for Formula grant funds, proposed projects must meet the following criteria (described in further detail below):

- a) All projects must comply with the Clean Water Initiative Program Funding Policy Eligibility Criteria
- b) All projects must meet the definition of a Clean Water Project outlined in the Clean Water Service Provider Rule
- c) All projects must have a non-regulatory component or exceed the regulatory requirements (per 10 VSA chapter 47, and not subject to the requirements of 6 V.S.A. chapter 215).
- d) Projects located on agricultural lands must be natural resource restoration projects on non-RAP farms and meet specific practice type and farm size requirements, and be approved by the Agency of Agriculture (AAFM)

Clean Water Initiative Program (CWIP) Funding Policy Eligibility Criteria

The [CWIP Funding Policy](#) serves as a communication tool to clean water project proponents and prospective grant/contract recipients, outlining 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 including Water Quality Restoration Formula Grants. The Funding Policy lists out a series of eligibility criteria that must be met for projects to receive funds administered by the CWIP. This policy is subject to

change on an annual basis. CWSPs are expected to use the most current Funding Policy whenever reviewing project proposals for eligibility.

Project must have a non-Regulatory component

Formula grants are grants to clean water service providers to meet non-regulatory pollutant reduction requirements as described in EPA approved water quality restoration plans (i.e., such as TMDLs for Lake Champlain and Lake Memphremagog). As such, to be eligible for Formula Grant funding projects cannot be driven by a regulatory requirement. Regulatory projects are those required/compelled by water quality-related regulatory programs. For example, a stormwater retrofit project on a private property that has more than three acres of impervious surface and is subject to the stormwater General Permit 3-9050 is a regulatory project. As another example, a wetland enhancement project would not be eligible if it is required compensation as part of a wetland permit or restoration of a wetland violation. However, non-regulatory projects (i.e., projects performed voluntarily) may still be subject to regulatory oversight and may require review for jurisdictional determinations, including the potential need for state permits.

There may be cases where an individual project is designed to fulfill both regulatory requirements and exceed regulatory requirements to also achieve phosphorus reductions from non-regulatory/sub-jurisdictional sources. An example might be a regional stormwater treatment practice that could be designed to treat a Three-Acre General Permit regulatory site while also receiving nonpoint source pollution from a larger municipal drainage area. Additional Guidance is needed to define eligibility for this scenario, portion of project cost eligible for Formula Grant funds, and special provisions to ensure coordinated tracking/reporting across potentially multiple funding and regulatory programs. An addendum to this Guidance will address these considerations.

Please note that, in general, Municipal Separate Storm Sewer System (MS4) permit regulatory projects are not eligible for Formula Grant funds. An MS4 permit regulatory project is defined as a 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). However, and consistent with the paragraph above, an MS4-initiated project could be constructed towards meeting its regulatory requirements as well as reduce phosphorus from the non-regulatory sector. In this case, on a case-by-case basis, Formula Grant funds may be used to support such a project but only at a dollar level equivalent to the relative phosphorus reduction share attributable to the non-regulatory sector. Once an MS4 has, as a community, met its phosphorus reduction targets an MS4 may apply to a CWSP to access Formula Grant funds to achieve supplemental phosphorus reductions beyond its regulatory requirement. Lastly, MS4 permit minimum control measures are ineligible for Clean Water Funds.

(6) “Clean water project” means a best management practice or other program designed to improve water quality to achieve a target established under 10 V.S.A. § 922 that:

(B) is within the following activities:

(iv) agriculture, when:

(a) it is a natural resource project as described in subdivision (B)(ii) of this paragraph that is determined to be eligible in accordance with § 39403(d)(3) of this Rule; or

(b) it is a project on agricultural land that is not subject to the RAP because the farm does not meet the minimum eligibility criteria for the RAP to apply.

Agricultural and natural resource projects (i.e. all CWIP project types that can be funded with CWSP funds) on non-jurisdictional farms or farmland (i.e. lands not subject to the Required Agricultural Practices Rule) are eligible. Non-agricultural projects on jurisdictional farms are subject to AAFM review. Agricultural projects on jurisdictional farms are not eligible. CWSPs or project implementers shall consult with AAFM on jurisdictional farm project eligibility where AAFM will determine whether such a proposed project qualifies as a clean water project.

Note: For further clarification, please see the VAAFMM Guidance in App. A.

Determining Project Eligibility for New Project Types

When making a determination for new project types, the Secretary shall consider the alignment with clean water fund purpose, natural resource restoration potential, as well as Clean Water Funding Policy eligibility criteria. The Secretary must also make a determination of milestones and deliverables, and performance measures associated with a new project type and as it comports with TMDL sectors and relevant project types that are intended to meet TMDL pollution reduction goals.

§ 923 (c)(2) Determining Project Type Eligibility Outside of Standard Project Types. Upon the request of a CWSP, the Secretary shall evaluate a proposed clean water project type and issue a determination as to whether the proposed clean water project type is eligible to receive funding as a part of a Water Quality Restoration

5) Project Prioritization (§ 39-403(d)(1)).

Once projects have been screened for eligibility, they are ready to be prioritized to assist the BWQC in project selection. According to § 39-403, “the CWSP and BWQC shall develop and implement a project ranking schedule and scoring process to ensure that the highest priority projects are developed, designed, and implemented.” The following section provides required criteria and suggested data sources to inform these ranking schedules to prioritize eligible projects. Note this section provides explicit guidance on how to calculate certain criteria or factors but is silent on the relative weight between the criteria. In general, weighting should be decided upon and documented in each CWSP and BWQCs ranking schedule in advance of reviewing any projects.

Once the CWSP and BWQC have established a ranking schedule and scoring process, the CWSP shall be responsible for consistently applying this scoring process to all eligible proposed projects and presenting a preliminary ranking of project proposals for discussion and then final selection by the BWQC. CWSPs and BWQCs may elect to confer on scoring and jointly consider and agree to adjustments to scoring during BWQC deliberations on project selection. Weighting decisions and adjustments to scoring, including decisions made on co-benefits, should be documented in the BWQC meeting minutes if it diverges from the formal ranking schedule.

Reference to the CWSP Rule - § 39-403. Clean Water Projects. When identifying, prioritizing, and selecting clean water projects to meet a basin’s pollutant reduction target, the CWSP and BWQC shall: develop and implement a project ranking schedule and scoring process to ensure that the highest priority projects are developed, designed, and implemented within the available funding provided by the Formula Grant;

(4) consider empirical project-specific factors including the pollution reduction estimate, cost effectiveness of that reduction, design life, cost of operation and maintenance of the project, and conformance with the basin plan;

(5) consider co-benefits provided by the project; and

(6) prioritize projects in accordance with any additional requirements imposed by the Secretary’s guidance.

a) Required Criteria

The following section provides required criteria to apply in CWSPs and BWQCs ranking schedules to prioritize eligible projects. Required criteria for project ranking schedules are those listed in § 39-403 include overall pollution reduction relative to Basin specific targets, cost effectiveness (e.g.,

the project cost per pollution reduction over the lifespan of the project) design life, cost of operation and maintenance of the project, and conformance with the basin plan.

b) Pollution Reduction Cost Effectiveness

Cost effectiveness is a function of the cost as measured against the annual total phosphorus load reduction value of the project. CWSPs and BWQCs are required to follow the pollution reduction cost effectiveness equation/calculation, described below, to ensure consistency across basins and project types. If CWSPs are uncertain about initial pollution reduction calculations, they are encouraged to confer with the appropriate DEC staff to discuss whether initial calculations are accurate.

- i. Estimating annual average total phosphorus load reduction (kg/yr): The DEC will provide CWSPs, BWQCs, and implementers training on and access to pollution reduction calculator tools consistent with the methods included on the Standard Operating Procedures (SOPs) for Tracking and Accounting of Phosphorous. CWSPs shall use this calculator to determine the pollution reduction value of a proposed project (or to confirm the pollution reduction value provided by the project proponent/implementer). CWSPs shall use this pollution reduction value and the project proposal's budget to determine cost-effectiveness.
 - (1) Note: There remain certain project types for which methods to estimate total phosphorus load reductions are still under development, such as for wetland restoration.
 - (2) Note: Floodplain restoration projects with a floodplain storage phosphorus reduction benefit receive 100% credit in year 1 and then performance tapers down to 50% credit in year 2 and beyond. For these project types, the year 2 and beyond value (see Functioning Floodplain Initiative Tool, Stream Stability and Storage Credit Summary, "Years 2+ Credit (kg/yr)" column for value) should be applied in the Formula Grant pollution reduction cost effectiveness calculation. The year 2 and beyond value represents the performance of a project at the 15-year implementation target timeframe. Note: FFI guidance and training will demonstrate how this will be assessed.
- ii. Project Costs for Budget Development: Project proposal budgets must include the projected project costs proposed to be covered by the Formula Grant, as well as any match/leveraging that was secured during the identification and initial design phase of a project in order to inform total project costs, including implementation. For purposes of Formula Grant cost effectiveness estimates, project cost may exclude match/leveraged funds from **non-state sources**, effectively incentivizing leveraging of private, local or federal funds in project scoring. CWSPs should present both cost effectiveness values, including and excluding match/leveraged sources, to the BWQC for consideration. (Note: CWSPs will still be expected to report actual project costs, including match/leveraged dollars, at the project-level to ensure data reflect the true cost of projects for future revisions to Formula Grant Fund Allocation Methodology). Project proposal budgets can come from professional estimates provided by engineers, professional consultants, construction companies and

contractors/ implementers. (Note: operation and maintenance costs will be evaluated and calculated separately).

(1) Standard cost contingencies may be developed by the CWSP to help mitigate against the incentive to underbudget project contingency needs in these cost-competitive solicitation rounds. Standard contingency values may vary based on several factors such as project type, size, risk, or phase.

iii. Pollution reduction cost-effectiveness shall be calculated as follows:

(a) Cost effectiveness (\$/kg/yr) = (15 years/design life years) * (total capital project cost (dollars) for design and construction) / (annual average total phosphorus source load reduction (kg/yr))

Please note regarding design life: For purposes of this calculation, design life is capped at a 15-year maximum to be consistent with the Formula Grant target and implementation timeframe. Additional context is provided below. The calculation includes a design life cost multiplier to adjust down cost effectiveness of projects with a design life of less than 15 years, acknowledging that additional projects would need to be implemented to recover phosphorus reductions for a project with a design life of less than 15 years. Please refer to DEC Standard Operating Procedures for Tracking and Accounting of Phosphorus Reductions to determine the projected clean water project design life⁵ (___)

- i. Example for project with 15-year design life:
 - a. Total capital project cost for design and construction = \$500,000
 - b. Annual average total phosphorus source load reduction = 400 kilograms/year
 - c. Design life = 15 years
 - d. Design life cost multiplier = 15 years/15-year design life = 1
 - e. Cost effectiveness = \$1,250 /kilogram/year

- ii. Example for project with 7-year design life:
 - a. Total capital project cost for design and construction = \$500,000
 - b. Annual average total phosphorus source load reduction = 400 kilograms/year
 - c. Design life = 7 years
 - d. Design life cost multiplier = 15 years/7-year design life = 2.14
 - e. Cost effectiveness = \$2,675 / kilogram/year

- iii. Example for project with 20-year design life:

⁵ Standard Operating Procedures for Tracking and Accounting of Phosphorus Reductions are available here: <https://dec.vermont.gov/water-investment/cwi/projects/tracking-accounting#SOP>

- a. Total capital project cost for design and construction = \$500,000
- b. Annual average total phosphorus source load reduction = 400 kilograms/year
- c. Design life = 20 years
- d. Design life cost multiplier = 15 years/15-year design life cap = 1
- e. Cost effectiveness = \$1,250 / kilogram/year

Additional Notes/Context on Pollution Reduction Cost Effectiveness Equation:

- (a) The pollution reduction cost effectiveness equation represents the cost of designing and constructing/implementing each new increment of phosphorus reduction over the 15-year Formula Grant target and implementation timeframe. This formula is intended to be used to support project scoring and prioritization. The method used to calculate cost effectiveness in other contexts may be different, such as the *Vermont Clean Water Initiative Annual Performance Report*, where project level cost effectiveness is assessed based on the projected design life of the project, rather than in relation to the 15-year implementation target timeframe.
- (b) The pollution reduction cost effectiveness equation must use **source load**⁶ to estimate the total phosphorus load reduction to be consistent with the total phosphorus load unit of the Formula Grant targets.
- (c) Project lifespans longer than 15 years are not factored in this pollution reduction cost effectiveness equation, as this equation is focused on cost effectiveness toward meeting the Formula Grant target under the 15-year implementation timeframe. However, projects, such as river corridor easements, with lifespans longer than 15 years may receive additional points in the scoring to reflect long-term benefits/performance (see “Design Life Beyond 15 Years” criteria below).
- (d) In future years, annual operation and maintenance costs may be added as a component of pollution reduction cost effectiveness. In the interim, annual operation and maintenance costs may be factored in other project prioritization criteria (see “Cost of Operation and Maintenance of the Project” criteria below).

Pollution reduction cost effectiveness in the context of project ranking

The pollution reduction cost effectiveness of the project is the primary metric for ranking projects as it allows an apples-to-apples comparison of a projects’ efficiency against all other projects. CWSPs and BWQCs are encouraged to weight this factor heavily in their ranking schedules as this analysis allows the CWSP/BWQC to look at the impact any given dollar has on reducing phosphorus pollution. In other words, the better the cost effectiveness, the larger the impact of each dollar spent, when compared against other projects.

⁶ As opposed to the delivered load, which is a function of attenuation factors

- (1) After a few project selection rounds Clean Water Service Providers (CWSP) and their Basin Water Quality Councils are strongly encouraged to identify and post a minimum acceptable phosphorus reduction cost effectiveness for projects they are willing to entertain. This would be called their “cost-effectiveness threshold.” In the absence of a cost-effectiveness threshold there is no clear way to determine whether a project located in the “Formula Grant” basins is a “better fit” for Water Quality Restoration Formula grants as opposed to Water Quality Enhancement grants. If “better fit” is unknown, Water Quality Enhancement Grant Funding Program Administrator(s) do not need to discuss every project with a phosphorus reduction potential with the applicable CWSP. In these scenarios, if their project has any projected phosphorus reduction potential, project proponents are simply encouraged but not required to first apply for funding through their local CWSP. The existence of a “cost-effectiveness threshold,” therefore, increases the likelihood of projects being directed towards the CWSP/BWQC.

During early project phases some projects will have higher levels of uncertainty in terms of pollution reduction cost effectiveness and other scoring criteria inputs (e.g., landowner commitment, project feasibility).

- (2) The [Water Quality Restoration Formula Grant Targets and Fund Allocation Methodology](#) provides benchmarks to consider reasonable values for cost effectiveness at the sector and project category-level (i.e., cost per unit phosphorus reduced, referred to as “cost rates”). Additionally, the Functioning Floodplains Initiative (FFI) Tool contains a lookup table with pollution reduction cost effectiveness benchmarks to further evaluate river/floodplain restoration projects at the project type/best management practice-level. Note that it is understood and, indeed, expected that project effectiveness estimates received may not match these benchmarks given the impacts of inflation. See Chapter _____ on how inflation will factor into CWSP evaluation of "Adequate Progress" towards targets. These benchmarks should be used as rough guides for cost effectiveness but don't need to serve as ultimate thresholds.

c) Other Criteria to Consider in Project Scoring

Other criteria that CWSPs and BWQCs should consider in project scoring includes the cost of operation and maintenance of the project, design life beyond 15 years, conformance with the basin plan, and co-benefits which shall account for the remaining percentage of the total project score beyond the pollution reduction cost effectiveness equation (see § 924(b)). For instance, if the cost-effectiveness rank accounts for 60% of the total project score, then cost of operation and maintenance of the project, design life, conformance with the basin plan, and co-benefits shall account for 40% of the total project score). The CWSP and BWQC may determine their own methodologies for accounting for the following required components in their ranking schedules.

i. Cost of Operation and Maintenance of the Project

Operations and maintenance costs may be added to the cost effectiveness calculations once a consistent process for estimating these costs across most project types is available. However, before this time CWSPs and BWQCs may consider quantitative estimates of operation and maintenance costs where available and/or where a preliminary estimates for the operation and maintenance costs for a project type over the project design life may be needed as a near term measure.

ii. Design Life Beyond 15 years

Design life is the length that a project is expected to perform. The pollution reduction cost-effectiveness calculation and CWSP targets include consideration for projects with a design life of shorter than 15 years. There are considerable benefits to projects that have a design life beyond 15 years as continued phosphorus reductions will be necessary to meet water quality standards into the future. The CWSP may grant a higher score for projects with a known cost effectiveness beyond 15 years.

iii. Local, Basin Specific Prioritization Framework (conformance with the Basin Plan)

- a) In considering a project ranking framework, CWSPs and BWQCs should also consider how projects may address the following:
- i. Treats or assesses a water quality problem other than phosphorus loading identified by physical, biological, or chemical monitoring in a target watershed identified in a State-sanctioned assessment or Tactical Basin Plan using:
 - ii. Current monitoring and assessment data (within the past 10 years), or
 1. Long-term trend data (e.g., LaRosa Monitoring Program).
 - iii. Be identified as a (medium – high) priority in a State supported assessment, such as a Storm Water Master Plan or a Lake Watershed Action Plan. Projects ID in State supported assessment plans greater than 10 years old may need additional information and/or require updated assessment to confirm they are still relevant and feasible with the current conditions at the site.
 - iv. Be a chronic problem or acute issue leading to a chronic problem in priority area not identified in an assessment that is:
 1. Supported by water quality monitoring data;
 2. Supported by DEC staff (WSMD) through other forms of documented evidence of impact.

6) Co-Benefits

As noted elsewhere, the primary consideration upon which a CWSP is evaluated is its ability to implement projects that reduce phosphorus pollution from voluntarily implemented (e.g., non-regulatory projects). CWSP will work with the BWQCs to establish a review system that evaluates the merits of each project brought forward including the value of any co-benefits that might exist. Part of this review necessitates determining which co-benefits are present in a proposed project,

which are not, and how important they are. When choosing between multiple, eligible projects, BWQCs will need to weigh the various co-benefits and project aspects against each other. While these criteria are required to be factored in project scoring and prioritization, CWSPs and BWQCs have flexibility in how co-benefit criteria are further defined and weighted in basin-specific ranking schedules.

The majority of the clean water project types not only help in meeting Vermont’s water quality goals under the Lake Champlain and Memphremagog TMDLs, but also can meet other restoration goals not only for these lakes, but for the local waterways and landscapes within Vermont’s major river basins. These conservation practices can provide multiple benefits by providing economic and public health benefits; reducing nutrient pollution; and improving local waterways and wetlands by helping with their restoration and protection. Per the reference in Chapter 4 of Act 76 Guidance, BWQCs may establish policy around how co-benefits are considered in the project identification and prioritization process. DEC recommends that if a potential project negatively impacts a co-benefit (e.g., wetlands impact) then it should receive negative points for co-benefits scoring.

- a) Vermont emphasizes “locally driven” strategies and co-benefit identification for the TMDL Phase 3 content of Tactical Basin Plans that correlate to those co-benefits envisioned as part of the Act 76 framework. Co-benefits are those that not only result in water quality improvements but also address other water quality restoration goals (e.g., other water quality impairments within river basins, and natural resource uses and values), local water quality benefits, as well as economic and ecosystem service benefits generated from restoration activities.
- b) In general, and as related to the intent of Act 76, co-benefits are additional benefits beyond phosphorus reduction, O&M costs, design life, and conformance with TBPs. Co-benefits can include but are not limited to:
 - Environmental, Social, Economic, Cultural, and Public Health Benefits
 - Environmental Justice, Diversity, Equity, and Inclusion (ex: indigenous values and perspectives)
 - Aquatic Habitat and Stream Health (e.g., brook trout habitat)
 - Healthy Watersheds
 - Climate Change/ Flood Resilience
 - Carbon Sequestration
 - Public Access
 - Recreation
 - Hazard Mitigation
 - Community Engagement
- c) Co-Benefits can be viewed as providing:
 - a. Natural Resource Uses and Values
 - E.g., see Vermont Wetland Evaluation [Form](#)

- b. Vermont’s Existing and Designated Uses (per the VT Water Quality Standards), such as
 - Recreation – swimming, fishing, boating
 - Aquatic habitat improvement (fisheries)
 - Aesthetics
- c. Ecosystem Services, such as
 - Flood resiliency – see the [UVM Gund Institute’s Economic Valuation of the Otter Creek during Tropical Storm Irene](#)
 - [See also regional, municipal, and/or local hazard mitigation plans](#)
 - Healthy watershed – see Contingent valuation studies (i.e., willingness to pay for a healthy ecosystem)
- d. Natural Infrastructure Economic Benefits
 - Value of Green versus Gray infrastructure investments
 - E.g., Green Stormwater Infrastructure to treat SW before it enters the municipal stormwater system.
- e. Protection of High-Quality Waters
 - As identified using biological or chemical data as defined under the VT Water Quality Standards (DEC 2017)

****Note - See NR206 report and co-benefit checklist in Appendix B***

7) Project Selection Considerations

Once a CWSP has screened project proposals for eligibility and applied preliminary prioritization, the CWSP shall present the prioritized list to the BWQC for final adjustment of scores and selection. BWQCs will typically meet quarterly and will review the slate of proposed projects presented to them for consideration at that open meeting. BWQCs will follow the operating procedures outlined in Chapter 4, as well as any supplemental governing procedural rules they adopt for their meetings.

BWQCs are not obligated to select any projects on the prioritized list and may reserve the right to reject any and all proposals if found to insufficiently meet the cost-efficiencies needed based on the Formula Grant Target and Fund Allocation Methodology. Once projects have been selected for funding, the CWSPs can initiate subgrant execution (in the case of granting rounds) or procurement of services (in the case of not granting rounds) to implement the selected projects, as appropriate. Please see Chapter 3 of Guidance for more on procurement. Any projects not selected for funding, due to limited phosphorus benefits, in a given round can be considered for funding to other funding sources, such as the Water Quality Enhancement Block Grant for consideration in subsequent grant rounds.

Projects should be considered with reference to the criteria described in Chapter 6, and in consideration of the following framework which can be used to help organize the CWSPs and BWQCs review and analysis. Projects should be preliminarily ranked yet, there are other relevant

considerations beyond these criteria, and the factors below should be reviewed when selecting projects.

The overall cost of a project as well as its cost efficiency must be considered. Cost can be reviewed either by phase, or if known, for the entire project (including operations and maintenance). Project cost could be established by soliciting quotes for the project, based on the project design. The cost for the project and/or for phase of development can be compared against the average/median cost data for similar projects. While cost-efficiency is a key metric for directly comparing the impact of one project to another, cost alone is also an important consideration for weighing the risk of a project. A more expensive project represents more risk, where a less costly project represents less risk.

Other Important Resources for Project Scoring, Selection, and Development

- a) Other important online tools for use in the development and implementation of a project ranking schedule and scoring process can be found via the Clean Water Portal, which includes the following:
 - i. The [Clean Water Projects Explorer](#) is an interactive application that allows interested parties to geographically search for details about individual state-funded clean water projects such as project funding, project outputs, and nutrient reductions.
 - 1. The Watersheds Project Database Search is the publicly accessible search interface for the Watershed Project Database which includes Clean Water Initiative Program funded projects, as well as potential projects in various stages of development identified through Tactical Basin Planning. See also the [Clean Water Project Data Management in the Watershed Projects Database \(WPD\)](#)
 - ii. ANR's [Permit Navigator](#) – used as a guide in determining what permits may be needed for a project on a single parcel.
 - iii. [Stormwater Treatment Practice \(STP\) Calculator](#) estimates the total phosphorus load reduction from a stormwater treatment practice based on practice parameters.
- b) Additional online project development and prioritization tools (that are currently in development) will include:
 - i. Functioning Floodplain Initiative (FFI) tool which is a Web-based mapping and tracking tool used to support identification of stream and floodplain restoration project opportunities for water quality, flood resiliency, and habitat functions as well as provide estimates of phosphorus reduction for river and floodplain restoration projects
 - ii. Phosphorous Calculator tools for buffer plantings, lake shore projects, forestry projects, and Road projects.
 - iii. [Forestlands Spatial Assessment Data](#) (currently in development)

8) Project Advancement (placeholder for content TBD)

Regardless of what stage a project initially enters the formula grant sphere, all potential clean water projects should be considered for “advancement” from design through implementation as a complete funding package.

Appendix A. VAAFMM Guidance: CWSP Model & Farms

Acronyms:

Clean Water Project (CWP)

Clean Water Service Providers (CWSP) Clean Water Service Delivery (CWSD)

SECRETARY OF ADMINISTRATION MEMO RE: ACT 76 OF 2019 REPORT ON

WATER QUALITY PROJECTS ON FARMS

This memo provides interpretation about how Act 76 of 2019 or the CWSD model will occur on farms. Specifically, this memo states the following:

‘Since all agricultural land use practices are to be operated according to the rules and programs required by law, any agricultural land use practice on a jurisdictional RAP farm cannot – by definition – be considered an eligible CWP.’

‘Innovative projects may be supported by AAFM or CWSPs, in consultation with AAFM, and will be coordinated under the tactical basin planning process in coordination with the agricultural water quality partnership group and relevant Basin Water Quality Council.’

‘CWSPs shall consult with AAFM quarterly on project selection and progress, and AAFM shall have the authority to determine whether a proposed project qualifies as a natural resource project eligible for CWSP implementation.’

‘The required reductions within the load allocation (LA) for agricultural lands will also be assigned to AAFM for implementation, with 10% of the LA for each lake segment basin partitioned to CWSPs to support implementation of natural resources projects.’

Definitions

Farm: means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to **farming** (see definition below), as defined in Section 2.16 of the Required Agricultural Practices (RAPs) rule, and that meets the **threshold criteria** as established in [Section 3 of the RAPs](#) (see criteria below) provided that the lessee controls the leased lands to the extent they would be considered as part of the lessee’s own farm. Indicators of control may include whether the lessee makes day-to-day decisions concerning the cultivation or other farming-related use of the leased lands and whether the lessee manages the land for farming during the leased period.

Farms are defined as persons engaged in farming who meet one of the threshold criteria for applicability of the Required Agricultural Practices below:

- has produced an annual gross income from the sale of agricultural products of \$2,000.00 or

- more in an average year; or
- is preparing, tilling, fertilizing, planting, protecting, irrigating, and harvesting crops for sale on a farm that is no less than 4.0 contiguous acres in size; or
- is raising, feeding, or managing at least the following number of adult livestock on a farm that is no less than 4.0 contiguous acres in size:

<ul style="list-style-type: none"> (1) four equines; (2) five cattle, cows, or American bison; (3) 15 swine; (4) 15 goats; (5) 15 sheep; (6) 15 cervids; (7) 50 turkeys; (8) 50 geese; (9) 100 laying hens; (10) 250 broilers, pheasant, Chukar partridge, or Coturnix quail; 	<ul style="list-style-type: none"> (11) three camelids; (12) four ratites; (13) 30 rabbits; (14) 100 ducks; (15) 1,000 pounds of cultured trout; or (16) other livestock types, combinations, or numbers as designated by the Secretary based upon or resulting from the impacts upon water quality consistent with this rule; or
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- is raising, feeding, or managing other livestock types, combinations, and numbers, or managing crops or engaging in other agricultural practices on less than 4.0 contiguous acres in size that the Secretary has determined, after the opportunity for a hearing, to be causing adverse water quality impacts and in a municipality where no ordinances are in place to manage the activities causing the water quality impacts; or
- is managed by a farmer filing with the Internal Revenue Service a 1040(F)-income tax statement in at least one of the past two years; or
- has a prospective business or farm management plan, approved by the Secretary, describing how the farm will meet the threshold requirements of this section.

Farming: means:

- a) the cultivation or other use of land for growing food, fiber, Christmas trees, maple sap, or horticultural, viticultural, and orchard crops; or
- b) the raising, feeding, or management of livestock, poultry, fish, or bees; or
- c) the operation of greenhouses; or
- d) the production of maple syrup; or
- e) the on-site storage, preparation, and sale of agricultural products principally produced on the farm; or
- f) the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm; or
- g) the raising, feeding, or management of four or more equines owned or boarded by the farmer, including training, showing, and providing instruction and lessons in riding, training, and the management of equines.
- h) the importation of 2,000 cubic yards per year or less of food residuals or food processing residuals onto a farm for the production of compost, provided that:
 - a. the compost is principally used on the farm where it is produced; or
 - b. the compost is produced on a small farm that raises or manages poultry.
 - c.

The agricultural practices on farms that are governed by the RAP rule include:

- the confinement, feeding, fencing, and watering of livestock;
- the storage and handling of agricultural wastes principally produced on the farm;
- the collection of maple sap principally produced from trees on the farm and/or production of maple syrup from sap principally produced on the farm;
- the preparation, tilling, fertilization, planting, protection, irrigation, and harvesting of crops;
- the ditching and subsurface drainage of farm fields and the construction of farm ponds;
- the stabilization of farm fields adjacent to banks of surface water, and the establishment and maintenance of vegetated buffer zones and riparian buffer zones;
- the construction and maintenance of farm structures, farm roads, and associated infrastructure;
- the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm;
- the on-site storage, preparation, and sale of agricultural products principally produced on the farm from raw agricultural commodities principally produced on the farm;
- the on-site storage of agricultural inputs for use on the farm including, but not limited to, lime,

fertilizer, pesticides, compost and other soil amendments, and the equipment necessary for operation of the farm; and

- the management of livestock mortalities produced on the farm.
-

In consideration of this interpretation, the following table detail eligible and ineligible CWP depending on farm size and project type.

‘Since all agricultural land use practices are to be operated according to the rules and programs required by law, any agricultural land use practice on a jurisdictional RAP farm cannot – by definition – be considered an eligible CWP.’

Agricultural projects and clean water agricultural projects on farms should not be the focus of CWSP. As this new program rolls out, all CWP on farms (any instance where landowners are farmers, or where you are working on farmland) require VAAFMM regulatory review and approval to ensure a consistent approach statewide that follows rules, regulations, and laws in place.

SIZE OF OPERATION	POTENTIALLY ELIGIBLE	INELIGIBLE
<p>Operations that do not meet the criteria of a Small Farm Operation</p>	<p>AAFM does not typically regulate this size operation, so all non-agricultural clean water projects would be eligible for implementation by a CWSP.</p> <p>If an agricultural project is proposed, the project may be eligible by a CWSP after confirmation that the operation is not a jurisdictional farm, defined above. Any cases that require consultation will occur in coordination with AAFM via the farm determination process.</p>	<p>Any farm not meeting the livestock, acreage or income thresholds that has a WQ concern can be required to be regulated by the RAPs depending on the situation. (3.1(e) and 4.1(d))</p> <p>If WQ concern exists, the Secretary of Agriculture can require any operation to comply with the RAPs. If this has occurred, then the projects on that farm would not be eligible CWP.</p>
<p>All FARMS: SFO, CSFO, MFO AND LFO</p>	<p>The following non-agricultural projects may be eligible after VAAFM regulatory review and approval:</p> <ul style="list-style-type: none"> ● Wetland Restoration Easement ● River Corridor Easement ● Stream Restoration Project ● Riparian Buffer Projects <p><i>Please note this is not an exhaustive list of all natural resource practices.</i></p>	<p><u>No agricultural projects are eligible for CWP. This includes the following projects:</u></p> <ul style="list-style-type: none"> ● Production Area Practices - e.g. Waste Storage Facilities, Diversion ● Fence / Livestock Exclusion ● Filter Strips ● Cover Crop ● Reduced Tillage ● Manure Injection ● Rotational Grazing <p><i>Please note this is not an exhaustive list of all agricultural practices.</i></p>

Appendix B. NR206 Co-Benefit Checklist

Project Title:

1. Environmental Justice		
Project prioritizes vulnerable areas (refer to appendix 1) and engages their community members and stakeholders. Access to clean water and food, acknowledging land stewardship, sacred resources, and Indigenous property are environmental justice issues that could be considered.	Yes	No
2. Clean Water and Sanitation		
This project directly addresses reduction of key pollutants other than phosphorus. These can include, but are not limited to: Nitrogen, Sediments, Road Salts, Heavy Metals, Microplastics, pathogens or other contaminants of emerging concern.	Yes	No
3. Ecosystem Services and Climate Resiliency		
This project addresses the co-benefits related to ecosystem services and climate resiliency that may come with reducing phosphorus. Ecosystem services include carbon sequestering, flood resiliency, reducing erosion, promoting pollinators and native species, and biodiversity.	Yes	No
4. Recreation and Community		
This project addresses the ways that outdoor space positively affects the community through access to recreational activities, more outdoor spaces, or increasing tree canopy.	Yes	No
5. Education		
This project includes aspects of public outreach designed to educate community members about the importance of phosphorus reduction and watershed health and/or involve community members in project development and implementation. This may include interpretive signage, educational series/workshops, making project development meetings open to the public, and/or classroom work.	Yes	No
6. Economic Growth		
This project addresses cost-efficient and sustainable economic growth through strategies such as workforce development, sustainable energy practices, green stormwater infrastructure, and increased property values.	Yes	No

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