

**Massachusetts Department of Environmental Protection
Clean Water State Revolving Fund
Construction Stage Project Ranking System**

Project Evaluation Form Tier Classification

Under the Tier Classification system, Project Evaluation Forms (PEFs) proposals are ranked into one of five Tiers, each having a set point value, based on the threats to public health and/or the environment to be addressed by the proposed project.

The projects base points are 500 points for Tier V, 400 points for Tier IV, 300 points for Tier III, 200 points for Tier II and 100 points for Tier I. Additional points can be assigned based on documented public health impacts, environmental criteria and the Department's priorities as listed on the PEF ratings screen in the eSRF portal. The total additional points add up to 99 so that projects cannot be elevated to a higher tier. The project ranking is then defined within and across tiers to develop the Project Priority List and the Intended Use Plan. The possible priority ranking range is a maximum of 599 points for a Tier V project to a minimum of 100 points for a Tier I project. Tier V is the highest priority tier. The tier system approach greatly enhances MassDEP's review of proposed projects and improves consistency. The scoring system ensures that Clean Water projects addressing the greatest environmental and/or public health needs are given priority for SRF financial assistance.

TIER V PROJECTS: 500 Points

Description: Clean Water projects proposed by applicants to eliminate or mitigate documented **high threats** to public health and/or **high impacts** to the environment to address **noncompliance** under high level enforcement (HLE) orders, or projects being implemented consistent with an area-wide wastewater management plan under section 208 of the federal Clean Water Act, 33 U.S.C. 1288 or a suitable equivalent plan determined by the Department of Environmental Protection. These proposals would include projects designed to address or correct an exceedance of an NPDES permit limit; groundwater discharge permit limit; projects intended to achieve a final Total Maximum Daily Load (TMDL); projects being implemented consistent with a Comprehensive Water Resources Management Plan (CWMP), Long-term CSO Strategy, Stormwater Management Plan, or an area-wide Water Quality Management Plan; or projects to abate contamination of a drinking water source.

TIER IV PROJECTS: 400 Points

Description: Clean Water projects proposed to protect public health and the environment by addressing **imminent threats** to the major elements of wastewater conveyance, treatment, and discharge systems. The following summarizes the information for Tier IV:

- Projects proposed to address/correct a significant public health and environmental threat that would result from a POTW treatment facility **exceeding its planned useful life cycle with documented signs of failure or deficiencies** that indicate imminent component failure, which have been identified in a MassDEP-approved Comprehensive Wastewater Management Plan (CWMP) or Facility Plan. If the threat remains unaddressed customers and the environment may be subject to unsafe conditions. An aging treatment plant would have at least one component that is creating significant deficiencies that impact the entire system.
- Projects proposed to address a major conveyance system component failure. Although not the sole component of a wastewater system, loss of a particular pump station, force main, or interceptor, which would affect 25% or more of the flows being conveyed to the treatment works.

TIER III PROJECTS: 300 Points

Description: Clean Water projects proposed to eliminate or mitigate documented **threats** to public health and/or **impacts** to the environment by addressing pollutant discharges and system failures that are not under an enforcement order or HLE to be completed and are proactive in nature to avoid a worsening problem.

TIER II PROJECTS: 200 Points

Description: Clean water projects proposed to upgrade, rehabilitate, or replace wastewater infrastructure components that are **approaching the end of their planned useful life cycle, but are neither subject to an enforcement order, nor are being recommended in a MassDEP-approved wastewater management plan or engineering report.** Although the infrastructure components may be currently operating with only minor problems, rehabilitation or replacement is proposed to proactively address the issue before problems occur.

TIER I PROJECTS: 100 Points

Description: Clean Water projects that focus on nonpoint source or wastewater pollution abatement, based on recommendations from local planning studies. Projects would not target an ongoing contamination issue, or projects that do not pose a threat to sensitive receptors.

PROJECT RANKING AND EVALUATION

Project Tier

Based on the Tier descriptions presented above, what Tier do you believe best characterized your project?

A. Public Health Impacts

What is the nature of the resource affected?

Description of the cause of the problems and how the problem affects the resource(s), substantiated using documentation such as a Watershed Management Plan, CWMP, Project Engineering Report (PER), sampling and lab results, or Board of Health records. Applicants must make direct connection between resources affected and documentation submitted. **Points for public health impacts in Part A will only be awarded if the resource is within the project area, the impact is documented, and the proposed project will address the problem.** On a project site map, show location of resources affected (public and private drinking water supplies, private homes, public streets, and parklands, etc.)

1) Public Drinking Water Supply - as defined in 310 CMR 22.02 ([310 CMR 22.00: Drinking water | Mass.gov](#)), is located within the project area. Document impacts to the supply via laboratory analysis or reports. If the supply is the only source available to the supplier, please note. For groundwater supplies, documentation must consist of sampling at either the withdrawal points or within the Zone II at a MassDEP Drinking Water Program-approved monitoring location. For example, in the case of nitrogen contamination, total N of 5 ppm or greater would demonstrate the existence of an impact, provided that the elevated concentration can be related to the problem, considering factors such as the existence of other potential pollution sources, the location of the wells in relation to the problem area, and the strata from which the groundwater is drawn. Document all potential hydrogeological impacts to a public drinking water supply.

2) Private Drinking Water Supply - refers to private wells within the project area that are shown via sampling analysis to be affected by waterborne pollutants. Affected wells should be pointed out on the site map. Laboratory results should be provided to help delineate the areal extent, the type, and the level of contamination. Have alternatives such as connection to another source or point-of-use/point-of-entry systems been evaluated?

3) Private Homes - refers to any residence affected by sanitary sewer back- up from a municipal sewer system into the home. Some evidence of the back-up and how the project will mitigate or eliminate impacts should be presented. Boards of Health reports or reports from the local sewer authority are acceptable documentation.

4) Public Streets or Parklands - refers to incidences of raw sewage flowing directly into public streets or parkland areas that would increase the potential for exposure to people. Such incident locations should be noted on the site map. Documentation from the Board of Health or the local sewer authority should be supplied.

5) Swimming Areas - refers to a designated swimming area that is posted, maintained, and monitored by a health or recreation agency and that has a documented closure(s) Documentation should include an explanation how the project will improve or eliminate these impacts.

6) Boating Areas - refers to an area of the affected water body that has identified public access points and a documented impact on these locations.

7) Sensitive Population Affected - refers to a concentration of population that is expected to be particularly at-risk via exposure. Applicable populations would include schools, nursing homes, and hospitals served by a private well, or whose grounds are affected directly by contamination. For stormwater projects, the point will be awarded if the sensitive population is in a flood zone within the project area.

8) Population Affected - The project-specific population immediately impacted or served by the proposed project, as applicable.

9) EJ communities - An EJ population must be located within the proposed project area and either affected by or serviced by project.

B. Environmental Criteria

What is the nature of the environmental problem encountered?

Brief narrative of the nature and extent of any problems identified in the checklist, discussing the manner in which the problem affects the resource(s) noted. CSO and SSO remediation projects are presumed to affect bacteria, turbidity and aesthetic issues and are awarded those points.

1) Aquatic Toxicity - Project addresses receiving water toxicity problem. The 303(d) list includes aquatic toxicity as impairment for some waterbodies. The PEF makes a connection between the project and a decrease in toxicity (such as the need for the addition or upgrading of de-chlorination). CSO and SSO projects that attempt to reduce I/I are not presumed to address aquatic toxicity without documentation. Note that pathogens are not considered aquatic toxicity.

2) Nutrients - Defined as (upcoming or existing) impairment as documented in the 303(d) list (such as the need to upgrade treatment to address phosphorus from a wastewater treatment facility or to sewer an area upstream of a 303(d) list nutrient impaired pond), treatment plants, collection systems and/or alternative technologies listed in an area-wide wastewater management plan under section 208 of the federal Clean Water Act, 33 U.S.C. 1288; or a suitable equivalent plan determined by the Department of Environmental Protection whose primary purpose reducing nutrient load to estuaries experiencing water quality declines due to nitrogen enrichment as documented in a MEP Technical Report, a TMDL or a 303(d) listing.

3) Bacteria - The presence of coliform bacteria or E. Coli in a drinking water source or receiving water or enterococcus in a water body, as determined with analytical data. The 303(d) listing of “pathogens” is acceptable evidence of bacterial contamination. The information presented in the PEF should provide the data and the relevant limit exceeded or threatened (permit limit, drinking water Maximum Contaminant Level (MCL), swimming (beach)). Problems that are assumed to contribute to exposure to bacteria include CSOs, SSOs, on-site system breakouts, and on-site systems within groundwater.

4) Turbidity - Suspended particles in a waterbody as a result of human activity. The 303(d) list includes turbidity as a problem for some waterbodies. Examples of projects addressing turbidity include nonpoint stormwater projects and treatment of phosphorus to reduce algae growth. CSOs and SSOs are presumed to cause increased turbidity.

5) Dissolved Oxygen – PEF shows a dissolved oxygen impairment in receiving water as documented in the 303(d) or other DEP-accepted report and must demonstrate that the proposed project will mitigate or eliminate the problem.

6) Temperature - PEF shows a temperature impairment in receiving water as documented in the 303(d) or other DEP-accepted report and must demonstrate that the proposed project will mitigate or eliminate the problem.

7) Noxious Aquatic Plants - refers to the excessive growth of plant species in or near a waterbody, affecting the water quality and habitat. Documentation includes listing on the 303(d) list, diagnostic/feasibility studies, or Total Maximum Daily Load (TMDL) reports. Proposed project must mitigate the noxious weed problem.

8) Aesthetics - Floating solids, strong odors and discoloration of a waterbody indicate aesthetic concerns. These may be documented in the 303(d) list. CSOs and SSOs are both assumed to include floating solids and therefore, would be considered to present an aesthetics concern. Demonstration of visual aesthetic concerns should include photos, with accompanying report and date, location, duration or intensity and person observing the problem. Official town reports are the appropriate documentation.

9) Emergent Contaminants

If the project [addresses emergent contaminates this form](#) is required to be filled out and uploaded with PEF documentation.

What environmental resource(s) is affected?

Whether the targeted pollution is shown to have a direct and adverse impact on the resources listed below, is within the project area, and whether the project scope will address the documented issue.

10) Public Water Supply – Surface Water Zone A or Zone B: – It is defined at 310 CMR 22.02. Generally, Zone B is the secondary area of protection surrounding the Zone A of a Public Water supply. Points are available only for Zone A or Zone B, not both. Points will be given if the project area is within the Public Water Supply- Zone B only if points were not awarded for Zone A.

11) Public Water Supply – Ground Water Zone I or Zone II: – It is defined at 310 CMR 22.02. Generally, Zone II is the secondary area of protection surrounding the Zone I of a Public Water supply. Points are available only for Zone I or Zone II, not both. Points will be given if the project area is within the Public Water Supply- Zone II only if points were not awarded for Zone I.

12) Outstanding Resource Water (ORW) – Defined at 314 CMR (<https://www.mass.gov/files/documents/2016/11/nv/314cmr04.pdf>). These waters include public water supplies and their tributaries. Vernal pools and waters protected by Special Legislation are also ORWs.

13) Areas of Critical Environmental Concerns (ACEC): The Executive Office of Energy and Environmental Affairs (EEA) designates ACECs within the Commonwealth. These areas include marshlands, embayments, unique habitats, and swamps. Discharge does not need to be directly into an ACEC.

14) Commercial Fishery/Shellfish Area - There are 303 shellfish growing areas designated by the Division of Marine Fisheries (DMF), with six classifications ranging from “Approved” to “Prohibited”. There are also data layers in MassGIS for “Designated Shellfish Growing Areas” and “MA DMF Lobster Harvest Zones”. Applicant must demonstrate that water quality improvement due to project implementation may expand an area available for harvesting or extend periods when beds/areas are open.

15) Endangered Species Habitat - Areas identified in the Massachusetts Natural Heritage Atlas. There are also data layers in MassGIS, but they are only available by special request to the Natural Heritage and Endangered Species Program (NHESP). Points will be given if the project area is within the Endangered Species Habitat area.

16) Sole Source Aquifer (SSA) - The seven SSAs designated by US EPA, shown as the “EPA Designated Sole Source Aquifers” data layer of MassGIS. Applicant must demonstrate that the aquifer is impacted by the water quality problem and the project will mitigate the problem.

17) Ocean Sanctuary - The five areas described in M.G.L. c.132A, s.13. Project must be demonstrated to improve water quality entering a designated Ocean Sanctuary. This item refers to areas where water currently discharges to the designated Ocean Sanctuary, and water quality would be improved by the project.

18) Recreational Fisheries/Shellfish Area - Project area would include a water body with uses that have historically included recreational fishing or shell fishing. Implementation of the project should be expected to improve water quality sufficiently to allow for a return or expansion of the fish population.

19) Federally/State Designated River or Estuary or Freshwater Pond - Certain federal designations impart a higher level of significance to those rivers so designated. Federal designations include National Wild and Scenic Rivers. The proposed project would have to improve the water quality of a federally designated river. MassDEP has expanded this category to include rivers included in the most recent Biomap product as Core Habitat. Generally, communities bordering the mainstem of the designated river are considered to have the potential for direct impact; or an estuary or freshwater pond within a jurisdiction covered by an area- wide wastewater management plan under section 208 of the federal Clean Water Act, 33 U.S.C. 1288; or (ii) a suitable equivalent plan determined by the Department of Environmental Protection.

C. Program and Implementation Criteria

Consistency with EOOEA/MassDEP Watershed Management Plans or Priorities.

This section is intended to measure the extent to which this project implements planning recommendations or implements State or Federal requirements. Information supplied by the applicant will indicate the extent to which the applicant has explored and considered various options available. Points are awarded only for one planning category.

1) Implements a recommendation

Identify and describe how, and to what extent, the project implements or is consistent with one or more current priorities identified through Water Resource and Wastewater Planning, such as an EEA Watershed Management Plan; a CWMP, a Project Engineering Report (PER), a MassDEP-approved targeted watershed management plan, an area-wide wastewater management plan under section 208 of the federal Clean Water Act, 33 U.S.C. 1288; or (ii) a suitable equivalent plan determined by the Department of Environmental Protection, a Comprehensive Performance Evaluation (CPE), a Sewer System Evaluation Survey (SSES) (PER Level), a Stormwater Management Plan, a Water Quality Assessment Report, or a Diagnostic/Feasibility Study.

Applicants should refer to the planning requirements in the CWSRF regulations at 310 CMR 44.09 ([310 CMR 44 \(mass.gov\)](http://www.mass.gov)), to determine whether the planning satisfies the criteria for comprehensive wastewater management planning. Facility's plans or comprehensive wastewater management plans that are more than 15 years old will be considered the equivalent of local planning studies in MassDEP's evaluation.

Attach the cover page of the planning document and indicate the date of MassDEP approval. Reference and append the pertinent pages that support the proposed project. Points may be issued for planning documents that are approved or considered "approvable" by MassDEP.

3) Multi-community or regional solution

Indicates whether the project constitutes or is a component of a multi- community or regional approach to addressing the identified environmental problem and describe the additional benefits resulting from such an approach. Examples include: a) host community assisting another to resolve a water quality problem; b) community entering into an Inter-Municipal Agreement; c) project implementing a specific recommendation in a Regional study relative to the proposed project; d) a project included under a watershed management permit.

4) Innovative technology (only within the past 5 years)

MassDEP encourages applicants to consider using innovative technology to achieve their clean water goals. The narrative also should include certification from a Professional Engineer that the innovative technology meets current engineering standards/practices, and a statement from a Professional Engineer addressing the likelihood the innovative technology would be successful for the project being presented.

MassDEP publishes a list of “new technologies” that have been approved for use in Massachusetts in the last five years. MassDEP weblink to the list: [Innovative Alternative Technologies Approved for Use in Massachusetts](#)

Guidance is found at: [Approved Title 5 innovative/alternative technologies](#)

5) Energy Efficiency

Relative benefit of the project - Indicate whether the project was recommended by a third-party energy audit, assessment, or feasibility study. Projects resulting from an audit/assessment/study will receive double the number of points for projects without energy audits. Include the applicable portion of the audit and an explanation of the energy savings expected from the project.

Will the project implement an energy efficiency measure?

If the project includes implementation of an energy efficient measure or installation of a more efficient resource, calculate the percent energy savings expected due to the proposed project. Energy savings will be the kW hours expected to be saved by the energy efficient resource, in relation to total kW hours of the entire facility (i.e. the pump station or treatment plant) per year and expressed as a percentage. New installations, such as premium motors or variable frequency drives, are only eligible if they are upgrades to an existing facility. New facilities are not eligible for energy efficiency points unless they employ LEED design. Projects which reduce energy consumption over 25% will get points for “Substantial Energy Efficiency (EE)”. Projects which reduce energy consumption between 10-25% will get points for “Moderate EE”. Projects which reduce energy consumption up to 10% will get points for “Nominal EE”.

6) Renewable Energy

Relative benefit of the project - Indicate if the project was recommended by a third-party energy audit, assessment or feasibility study. Projects resulting from an audit/assessment/study will receive double the number of points for projects without the acceptable study. Include the applicable portion of the audit and an explanation of the energy savings expected from the project.

Will the project result in on-site renewable energy power generation?

If the project includes a renewable energy resource component such as wind power, solar (either photovoltaic or solar thermal), hydropower, biogas generation, or combined heat and power, calculate the expected renewable energy production benefit. Projects which produce over 50% of demand will get points for “Substantial Renewable Energy (RE)”. Projects which produce between 20-50% of demand will get points for “Moderate RE”. Projects which produce up to 20% of demand will get points for “Nominal RE”.

7) Climate Change Resilience and Adaptation

Projects addressing climate change resilience and adaptation include: a preliminary climate change exposure and risk rating; recommended climate resilience design standards for projects with physical assets; and guidance of best practices to support implementation. For stormwater projects, does the project address resiliency concerns due to flood risk or flooding history.

8) First Time PEF Submittal

Indicate if this is the first PEF submittal by the LGU for an SRF construction project or the first time in more than 5 years.

D. Best Management Practices (BMPs)

Applicants should identify if they are implementing Best Management Practices listed by the Clean Water Trust on its website and include proper supporting documentation in their application ([Borrower Documents, Reports and Publications | Mass.gov](#)).

1) Asset Management - Asset Management Planning is a process that utilities can use to prioritize and schedule maintenance and replacement of capital assets (pipes, valves, equipment, structures, etc.) in a proactive and cost-effective manner that allows for more predictable budget projections. An Asset Management Plan must include the five (5) essential components: asset inventory, level of service goals, criticality /risk analysis, life cycle cost analysis, and long-term funding recommendations. Proper documentation includes the cover sheet, index, and recommendations of the written Asset Management Plan. If the Asset Management Plan was funded through the SRF Program, a copy of the Planning Project Completion Certificate signed by the LGU is sufficient documentation. The Asset Management Plan must be no more than 15 years old to be awarded points.

2) Enterprise Funds - An enterprise fund is a separate accounting and financial reporting mechanism for which revenues and expenditures are segregated into a fund with financial statements separate from all other government activities. Full cost pricing encompasses all direct and indirect costs related to the service in order to maintain long-term financial sustainability. Points will be awarded for this question if the existence of an enterprise fund is documented. Proper documentation is a certification signed by the LGU that an enterprise fund has been established under M.G.L. c.44, §53F 1/2. A District, Commission or Authority automatically receives these points. Inclusion on the Department of Revenue's 2024 list of communities with certified enterprise funds is also sufficient documentation. For a stormwater project that does not include sanitary sewer separation, the existence of a Stormwater Enterprise Fund must be documented.

3) Inter-Municipal Agreement - Inter-Municipal cooperation on water infrastructure projects. Proper documentation includes the cover sheet, index, and signature page of each IMA agreement. For the points to be awarded, the applicant must be the host community.

E. Qualifying Green Projects

EPA requires that a portion of the capitalization grants to fund the SRF programs be targeted to green projects or components of projects. It is necessary that all green components be identified in the PEF to assure that the minimum target requirements are met. Guidance and examples of what is considered “green” can be found in the following documents:

[Green Project Reserve Crosswalk Table \(epa.gov\)](#)

[Green Project Reserve Guidance for the Clean Water State Revolving Fund \(CWSRF\) | US EPA](#)

[Green Project Reserve Eligibility Guidance](#)

The applicant is required to do the following, if points are requested in sections C. 4), 5) and/or 6).

- Identify each component of this project that may be considered green.
- Determine each component of the project that meets each of [the green components listed](#). The code and dollar value for each green component must be entered in **line E. 1)**
- An approximate estimate of the value of the green work as a dollar value must be reported on **line E. 2)** and as a percentage of the entire project cost on **line E. 3)**. The actual costs for the green components will be updated at the time of contract bid and award.

END OF PROJECT RANKING AND EVALUATION