# Massachusetts Department of Environmental Protection Drinking Water State Revolving Fund Construction Stage Project Ranking System

# **Project Evaluation Form Tier Classification**

Under the Tier Classification System, incoming Project Evaluation Forms (PEFs) proposals are ranked into one of five Tiers, each having a set point value. Secondary factors such as affordability, population, energy savings, sustainable development, and watershed management enhancement are also given importance under the review system. The Tier System is designed such that even if a project qualifies for the maximum amount of secondary factor points, the project cannot be elevated to a higher Tier. The scoring system also links SRF funding with other Drinking Water Program compliance and enforcement components such as Sanitary Surveys, Monitoring Reports, and Enforcement actions.

## **TIER V PROJECTS: 500 Points**

Description: Drinking Water projects proposed to protect public health by addressing compliance with a Federal or State drinking water standard or correcting a water contamination issue. These proposals would include projects designed to address or correct an exceedance of a Final USEPA or MassDEP Maximum Contaminant Level (MCL), Treatment Techniques (TT), Maximum Residual Disinfectant Level (MRDL), Action Level, and/or MassDEP Office of Research and Standards (ORS) Guideline Level (ORSG).

The following are SRF high priority projects:

- Planned lead and older brass service line replacement projects supported by materials evaluation reports and water main replacement projects that include lead and older brass service line replacements supported with lateral material records. Water main rehabilitation projects which include full lead service connection removals (main to water meter) may be eligible for enhanced subsidy under the Drinking Water SRF.
- Projects that reduce per- and polyfluoroalkyl substances (PFAS) in drinking water to concentrations below the levels of concern, for information refer to <u>PFAS in Drinking Water FAQ Mass.gov.</u> To be considered as a Tier V project, the concentrations for the sum of six PFAS substances (PFAS6) of the finished water tap of combined sources must be greater than or equal to 10 ppt. The PFAS level must be reduced, if feasible, to levels approaching the MassDEP Minimum Reporting Level of 2 parts per trillion (ng/L)

#### Documentation Required:

Drinking Water Monitoring Reports, Enforcement action and Orders, materials evaluation reports or records, and/or other data/reports verifying contaminant levels were greater than 80% of Federal or State drinking water standards for at least half (50%) of the samples taken during the past 18 months. Documentation also should include what and when temporary measures were enacted to insure delivery of potable water to the public during the past 18 months. Also, what back-up measures have been enacted to ensure the current delivery of potable water to the public. If the public water supply system is currently not in service, water quality data from the 18 months period prior to shutting down the system should be included.

## **TIER IV PROJECTS: 400 Points**

Description: Drinking Water projects proposed to protect public health by addressing imminent threats to the reliable delivery of drinking water to a population, including threats caused by expected climate change impacts (sea level rise, increase coastal storm surge, and increased riverine flooding). The following summarizes the information for Tier IV:

- Projects proposed to address/correct a significant public health threat that would result from a sole or major system component exceeding its planned useful life cycle with documented signs of failing or deficiencies that indicate

component failure. If the threat remains unaddressed many customers may be subjected to unsafe, unfit, or no water. A sole component would include an aging treatment plant having significant deficiencies that would impact 100% of the water system. Other sole components would include a water supply system's single transmission main, single storage tank, or threats to a Zone I or Zone A sole source (or a primary source without sufficient back-up) due to a compliance issue or an approaching contaminant plume.

- Projects proposed to address a major system component failure. Although not the sole component of a water supply system, loss of this particular transmission main, tank, source, or treatment plant would affect 50% or more of the customers being served by a small water supply system (i.e. a water supply system serving fewer than 10,000 persons) or affecting at least 5,000 consumers served by a large water supply system (i.e. a system serving 10,000 or more persons).

## Documentation Required:

For projects being proposed to address significant threats to public health, documentation is needed to show components of the drinking water treatment or distribution system are in danger of failing or likely vulnerable to climate change impacts. Such documentation may include an engineering report addressing the problem, hydraulic analyses, inspection reports, data/logs verifying emergency repairs to the system, water quality monitoring reports showing exceedances of Federal or State Drinking Water Standards, and documentation showing damage from previous storm surges, riverine flooding, sea level rise, or other impacts associated with climate change.

## **TIER III PROJECTS: 300 Points**

Description: Projects proposed to address water quality conditions because of Secondary Maximum Contaminant Level (SMCL) exceedances that make the water currently provided to customers aesthetically unfit to drink and results in consumers using or seeking an alternative water supply.

This tier includes the removal of asbestos cement pipe - care must be taken to protect workers and the public during this work; for guidance refer to <a href="MassDEP">MassDEP</a>'s Asbestos Cement Pipe Guidance Document (Mass.gov)

# **Documentation Required:**

For projects being proposed to address Secondary Maximum Contaminant Level exceedances that result in consumers seeking alternative drinking water sources, documentation would include water quality monitoring reports showing SMCL levels over the past 18 months, information suggesting consumers are seeking alternative sources of water via registered complaints; water consumption trend data and an updated consumer survey of potable water use, bottled water, and other alternatives usage.

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# **TIER II PROJECTS: 200 Points**

## Description:

- Drinking water projects proposed to upgrade/rehab/replace water supply infrastructure components that are approaching or have passed their planned useful life cycle. Although the infrastructure components may be currently operating with only minor problems, rehab or replacement is proposed to address the issue before there are serious problems.
- Projects that are proposed to address future drinking water regulations and/or standards.
- Projects also include the replacement of water meters that have had a significant number of broken or malfunctioning meters resulting in high unaccounted for water that could negatively affect the system's finances.
- Water main replacement projects that discuss replacement of lead goosenecks and service lines in general terms without records of lateral materials.

# **Documentation Required:**

An inventory of facility components showing the age and condition of the components; records, documents or an engineering report showing the planned useful life cycle of equipment currently in use; hydraulic analyses; records showing the age and date of installation of a transmission water line, water quality monitoring reports and identification of the project(s) on a capital improvement, asset management, or other planning document. For meter replacement projects, the applicant should provide documentation that describes the current condition of the water meters. This could include such documents as the age of the meters, annual water audit data showing that the meters are inaccurate or likely becoming inaccurate, calibration test results of the meters, a cost benefit analysis showing that the project will result in substantial savings, the percentage of unaccounted for water (considered high if it is more than 10% for high and medium stress basins or more than 15% for low stress and unassessed basins), documentation showing the water system is having difficulty in meeting the Water Management Act permitted withdrawal limits due to faulty meters; documentation showing that due to faulty meters, the water system needs to purchase water from other systems even if water conservation measures were to be implemented.

## **TIER I PROJECTS: 100 Points**

Description: Drinking water projects that are proposed to install, replace, or upgrade water system components that have an indirect connection to providing safe drinking water. Although such appurtenances may be important (or even critical) to a water system, these components are not directly involved in the delivery of potable water to the public.

#### **Documentation Required:**

- An inventory of facility components showing the age and condition of the components; records, documents or an engineering report describing the condition of the appurtenance components and identification of the project(s) on a capital improvement, asset management, or other whole system planning document.
- For stand- alone renewable energy projects, a plan, study, or other document showing the feasibility of the renewable energy source on the project site.

# PROJECT RANKING AND EVALUATION

# 1. Project Tier

Based on the Tier descriptions presented above, PEFs are assigned a Tier.

- a) If Tier V project, is there Water Main repair/replacement including full lead service for lead service line replacement (Main to water meter)?
- b) If Tier V project, is the PFAS concentrations of samples collected from the finished water tap of combined sources have documented concentrations of 10 ppt or greater? Indicate ppt amount in comments.

# 2. Water Quality

- a) Does the proposed project address serious existing water quality and/or treatment technique issues?
- b) Does the water quality monitoring results show an exceedance of a state or federal water quality allowable limit? "Allowable Limit" refers to MassDEP, MCL, MRDL, Action Level or ORSGL as applicable.
- c) Has the state or federal water quality limit been greater than or within 80% of the state or federal water quality allowable limit in over half of the samples taken within the past 18 months?
- d) Has the running annual average (RAA) exceeded 80%?
- e) If the project <u>addresses emergent contaminates this form</u> is required to be filled out and uploaded with PEF documentation.

# 3. Documented Actions

Does the proposed project address deficiencies found during a sanitary survey or other Mass DEP documented actions? (Please indicate if any of the following are attached to your PEF.)

a) Emergency Response Logs	h) Master Plan (excerpts)
b) Emergency Repair Logs	i) Photos of tuberculated pipe or pipe coupons
c) Enforcement Documentation	j) Renewable Energy Feasibility Study
d) Engineering Report	k) Sanitary Survey Report (applicable sections)
e) Hydraulic Study	I) Tank Inspection Report
f) Inventory Report (include life expectancy of components)	m) Water Quality Results
g) Leak Detection Reports	n) Other

# **Evaluation of Additional Factors**

The State Revolving Fund Regulations at 310 CMR 45.06 requires MassDEP to consider certain secondary factors in determining a project's placement on the project priority list. The project applicant should address secondary factors in the Project Narrative. To accomplish this, MassDEP will Tier classify each submitted PEF and then assign additional points, if appropriate, based on the following secondary factors:

## 1. Population size:

Projects can receive supplemental points for modifications or expansion of water treatment facilities and/or new water main installations based upon the population served by those projects. Water treatment facilities points will be provided based on the design flow capacity of the facility in relationship to total average daily flow, and water mains by the population served by that particular length of the water main being replaced or clean and lined. For water storage tanks, points may be provided if the new tank meets or exceeds recommended distribution system volumes from standards provided by AWWA, 10 State Standards and the Insurance Services Organization.

# 2. Energy Efficiency and Renewable Energy:

Additional points will be awarded for projects that include energy efficiency measures and/or renewable energy components. For projects proposing energy efficiency measures, the applicant should state whether the measures are being proposed to address recommendation (s) of an energy audit. A copy of the appropriate section of the energy audit, including the date the audit was completed and the author of the audit, should be provided. 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 (CHP) power, the applicant should state whether a feasibility study has been completed. If so, the applicant should provide the name of the author of the study and the date the feasibility study was completed.

## 3. Affordability:

Systems with service area that has a median household income (MHI) income of \$77,204 or less (That is, 80% of the 2018-2022 State Median Household Income in 2022 dollars of \$96,505 listed by the United States Census Bureau) will be awarded additional points. If the service area includes more than one such designated MHI area, a weighted overall average based on population served in each of the covered MHI areas times the MHI for that area plus the same for any other such area, and divided by the total number served, shall be used to calculate the combined MHI. Alternatively, applicants may provide a service-area specific MHI from an independent income survey covering the service area, provided that said independent survey is no more than eleven years old at the time of application. Water supply systems that have user rates (factoring in proposed project) in excess of 1% of the median household income relative to median household income also will be awarded additional points. EJ communities either affected by it or serviced by project. Small systems are identified as serving fewer than 10,000 customers.

# 4. Consolidation/Restructuring of a Public Water System:

The reason for the proposed consolidation must be included. Points may be given if the purpose of the project is to eliminate a public health problem or a technical, financial or managerial capacity problem. Points also may be awarded for consolidating a public water system designed to replace a contaminated source instead of treating contamination in the water supply system currently in use.

# 5. Compliance with Enforcement Order:

If the project is being proposed to comply with a state and/or federal enforcement action, both parties must sign an Administrative Consent Order (ACO) or MassDEP or EPA must issue a Unilateral Administrative Order (UAO). The project must be cited in the Enforcement Order, be approved by MassDEP, and state that it will address an underlying issue. Points are to be awarded for Higher Level Enforcement (HLE) only and not awarded for Notice of Noncompliance (NON) violations.

If the Order is not signed at the time the PEF is submitted, it must be executed prior to the publication of the Draft IUP to receive the additional points.

# 6. 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.

## 7. 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.

# 8. New Technologies:

The SRF program encourages the use of MassDEP approved innovative technology to ensure the delivery of high-quality potable water to the citizens of the Commonwealth. <u>List of Approved Technologies (Mass.gov)</u> Extra points will be awarded to projects that include any of the "new technologies" approved by the MassDEP Drinking Water Program as of the latest published list (only within the last 5 years). Applicants seeking points under this category should clearly identify the particular "new technology" they are proposing and the date the "new technology" was approved by the MassDEP Drinking Water Program. Since all media for PFAS removal treatment must be on the new approved technologies list, all PFAS treatment projects receive the new technology points.

## 9. Best Management Practices (BMPs):

Items a) through d) below identifying if the applicant is implementing the Trust's BMPs, to the extent that they are applicable to the project and with proper documentation in the PEF. For guidance refer to: Borrower Documents, Reports and Publications | Mass.gov

- a) Asset Management Asset Management Planning (AMP) 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.
- b) 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 I /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.
- c) Inter-Municipal Agreement- Inter-Municipal cooperation on Water infrastructure projects. Proper documentation includes the cover sheet, index, and signature page of each IMA agreement.
- **d) Leak Mitigation** Measures being implemented to control water loss in water systems. Proper documentation includes the front, index, and recommendations page of a written Water Audit; Capital Plan or Master Plan; Repair schedule; and Logs of system repairs, meter replacement, etc.