

Clean Water State Revolving Fund

2012 Project Evaluation Form

Instructions and Guidance

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Municipal Services
 June 2011

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INTRODUCTION

The Massachusetts Department of Environmental Protection (MassDEP) seeks to finance projects that mitigate documented impacts to public health or the environment, and for which proponents have completed comprehensive planning and alternatives analysis. Details supplied through the Project Evaluation Form (PEF) will help MassDEP to determine the extent to which your project meets the ideal.

Proponents seeking SRF financing for water pollution abatement projects must complete and submit one (1) paper copy and one (1) CD containing a PDF file of the completed PEF, no later than 12:00 noon on August 19, 2011 to:

John Felix, Deputy Director
MassDEP Division of Municipal Services
One Winter Street 6th floor
Boston, MA 02108.

The PEF is designed to draw out from the proponent details of Environmental and Public Health problems that exist as a direct result of polluted water. The magnitude of those problems is measured in the number of people affected and the resources directly affected by the water pollution. Beyond the description of the pollution conditions, the PEF is designed to enlighten MassDEP as to the manner that the proponent intends to use to address the problem, as well as the cost of that option. The best solution must mitigate the problem in a cost-effective manner, without creating consequences that are worse for the environment or public health than the problem being solved. **Proponents are urged to submit with the PEF a map of the project area with overlay of the service system and any relevant resource areas, for example the Zone II or the ACEC.**

The PEF measures the proponent's motivation for undertaking the project. MassDEP must ensure that the purpose of the project is to mitigate existing pollution problems as opposed to providing extra capacity that will encourage sprawl. Clean Water State Revolving Fund (CWSRF) financing decisions will support the Administration's resolve to "Fix It First" concerning infrastructure projects. Whether the project is the product of a community's voluntarily addressing a pollution problem, or is a response to enforcement action is also evidenced.

It is important to note that MassDEP places great emphasis on project planning. In fact planning is a regulatory prerequisite to construction under this program. Planning allows for a structured and analytical measurement of the extent of the problem and for the development of cost effective alternatives leading to a final solution. A more comprehensive planning effort will also help to describe the efficacy of the proposed solution. A proponent whose planning efforts are less than comprehensive will, under the PEF rating system, generally score lower than a project based upon a comprehensive planning process. You will note that within Section E there is a graduated point structure favoring the more comprehensive planning efforts.

The Project schedule for any proposal must meet the following deadlines:

Local Appropriation of Project Cost	June 30, 2012
Final Plans and specifications	October 15, 2012
Completed Application	October 15, 2012

Construction Projects must adhere to the additional deadline of:

Construction Commencement	June 30, 2013
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If the proposal's schedule does not meet these deadlines, it will not be eligible for placement on the 2012 Intended Use Plan

Recommended PEF Format

Part I **Proponent and Project Identification and Certification**

Part II **Project Schedule and Cost Estimation**

Part III **Project Narrative Checklist**

Project Narrative

Section A Project Summary

Section B Public Health Criteria

 I Cause of Problem

 II Nature of Exposure

Section C Environmental Criteria

 I Nature of Problem

 II Resources Affected

Section D Project Evaluation

Section E Program and Implementation Criteria

Section F Threshold Criteria

Appendix A Project Site Map

Appendix B Planning Report(s) used as project basis

Appendix C Laboratory analysis and other documentation

INSTRUCTIONS FOR PARTS I, II AND III

Part I Proponent and Project Identification and Certification

Provide the name of the Local Governmental Unit (LGU), the name, address, telephone number and e-mail address of its Authorized Representative and LGU contact (if different), and engineering consultant contact. Identify the project(s) for which assistance is sought and the river basin(s) impacted. The LGU's Authorized representative must sign the certification in item 5. Federal Employer Identification Numbers are requested. These are used by MassDEP in its SRF project tracking database.

For applicants proposing more than one project, separate Project Narratives and Part II and Part III forms must be completed for each project. If all of an LGU's projects have the same contact person and engineering contact, then only one Part I form should be filed.

Part II Project Schedule and Cost Estimate

Use Part IIA for construction projects and Part IIB for planning projects.

If local funding in the full amount necessary to undertake the project has already been authorized, attach a copy of the appropriate document. Otherwise, indicate the schedule for obtaining the requisite appropriation.

List the project schedule, including the date you would expect to file a loan application if the project were included on the Intended Use Plan.

Provide a detailed breakdown of the estimated technical (construction services) and construction costs. Use an **ENR Index of 9550**. If available, provide a completed engineers estimate for each construction contract. Eligibility must be consistent with MassDEP "Policy on Eligible Costs". Contingency should be 10% of total estimated construction cost (Project contingencies are reduced to 5% once as-bid construction costs are established). If the project includes costs for police traffic details, provide an explanation and detailed breakdown of the estimate (Note that costs for police traffic details are a separate cost of the LGU, and are not to be included in the construction contract cost).

Part III Project Narrative Checklist

While preparing the Project Narrative (described in the next section), use the checklist to help insure that all of the information relevant to establishing the project's priority rating has been documented.

Proponents should check all items that specifically apply and that can be documented as described below. The more items that are checked off, the more serious are the conditions being addressed. For each item checked, the proponent should detail in the narrative: 1) What area was looked at; 2) What was found; and 3) What was concluded. If you are working from a planning document that addresses any of the items, please provide a copy and provide specific page references where the information is detailed.

Project Narrative

The purpose of the project narrative is to allow proponents to concisely describe their understanding of the nature of the problem being addressed and how the proposed project will remedy the problem. The narrative helps to set the scene for the reviewer, providing a sense of what the proposal will address and accomplish, and provides the key areas on which the reviewer should focus. Use the item numbers in the left column of the checklist to identify responses to specific criteria.

Guidance for Project Narratives

Section A Project Summary

1. Briefly describe the objectives of the project. What water quality or public health issues are being addressed, how severe are the situations and how well have you documented the situation(s)?
2. Identify the general project area (include a **site plan/project map** of sufficient scale, with project and relevant resources overlain) and describe the scope of the project and key facilities or tasks being proposed. Describe the environmental benefit that you anticipate will result from implementation of the strategy you plan to execute.

Infiltration & Inflow Projects. Identify the area(s) to be studied, linear footage of pipe, and specific tasks proposed, following the general outline of the I/I Guidelines.

Collection System Projects. Provide the total linear footage of gravity sewer and force main, and design flows for any pumping stations. Include a tabular listing of street name/x-country segment, diameter of pipe, and the linear footage of gravity sewer, low pressure sewer and force main. The project map should show the layout of the proposed collection system with the type and diameter of pipe, direction of flow, pumping stations, roadways, the existing sewerage system and the location of any other related or interdependent projects.

In addition, for areas not designated as city or town centers, rural village districts or brownfields redevelopment areas, maps must demonstrate that at least 85% of the expected flow into the proposed system will be for flows in existence as of July 1, 1995 (see 310 CMR 44.04(1)(c) found on the MassDEP web site at <http://www.mass.gov/dep/service/regulations/310cmr44.pdf>). Designate lots occupied prior to July 1, 1995, undeveloped buildable lots, un-buildable lots, and house and lot numbers (zoning/assessors maps are suitable for this purpose.).

Projects serving areas designated as city or town centers, rural village districts or brownfields redevelopment areas can have as much as 50% of their design flow for new flows. In order to be approved by MassDEP, project proponents must demonstrate that the area(s) served by the project are serving areas zoned to encourage concentrated development in community centers. Areas that will be approvable include, but are not limited to 40R districts, designated growth centers as defined by the Cape Cod Commission, brownfields redevelopment sites and other areas determined by MassDEP to represent community centers into which a municipality is encouraging dense development as a part of a strategy to limit sprawl in undeveloped areas or outside of community centers. Project proponents must submit maps to demonstrate that at least 50% of the expected flow into the proposed system will be for flows in existence as of July 1, 1995 (see 310 CMR 44.04(1)(c)). Designate lots occupied prior to July 1, 1995, undeveloped buildable lots, un-buildable lots, and house and lot numbers (zoning/assessors maps are suitable for this purpose.). Other information regarding zoning and efforts to control sprawl must be submitted for review by MassDEP.

Existing wastewater flows and wastewater flows from undeveloped lots can be derived from actual water meter readings and estimating vacant lot flows using similar zoning and development. Alternatively, if the project area does not have metered water, Title 5 flows can be used to show the existing wastewater flows and expected wastewater flows from buildings and lots. Project area flows must be derived with a single consistent method. Water metered flows cannot be presented with Title 5 flows.

Nonpoint source projects that encompass community-based Title 5 inspection and upgrade programs. Include a copy of the LGU's comprehensive plan of on-site system inspection, if available. (See 310 CMR 15.301(4)(c) found on the MassDEP Web site at <http://www.mass.gov/dep/service/regulations/310cmr15.pdf>).

3. For Construction stage projects, describe planning efforts that have been undertaken to develop this recommendation, including any alternative analysis. Note in the narrative the Comprehensive Wastewater Management Plan or Project Evaluation Report from which the project was developed, and how the project is consistent with the Plan or Report. Please provide a copy of the report if feasible. In the alternative, provide the following photocopies from the Plans or Reports to include: 1) cover page with title, date and authoring firm; 2) page(s) with description of the water quality or health problem; 3) page(s) with a description of the recommended alternative; and 4) page(s) that summarize the costs for the recommended alternative.

Section B Public Health Criteria

I. What is the cause of the public health problem or nuisance that the project will address?

Describe the cause of the problems identified in Section B of the checklist, discussing how the problem affects the resource(s) noted.

Describe the size and character of the population threatened or negatively affected by the identified risk to public health (e.g., users of a community public water system, owners of private wells, presence of sensitive populations (schools, nursing homes, hospitals, etc.).

Describe the frequency and magnitude of the recurring problem, including exceedence of drinking water MCLs or closure of beaches.

Provide documentation, in the form of published reports of Municipal, Local, State or Federal entities engaged in Public health. Laboratory results are also acceptable. Please provide copies of the reports with page number references to the relevant information. Note that any item that does not include documentation within the application will not receive points.

Definitions of items in Section B.I:

(1) CONTAMINATED STORMWATER

Means storm water runoff, snowmelt, and surface runoff that picks up pollutants and deposits them in surface waters or ground water. The proposed project must directly control the cause of the stormwater-related threat to public health via BMP controls between the catch basin and outfall (including wet weather conditions).

(2) ILLICIT CONNECTIONS

Illegal sewer connections to storm drainage systems, evidenced by dry weather data, smoke testing, I&I and SSES studies, BOH records or other official reports (This section is separate from contaminated stormwater. If both conditions exist, please describe separately.)

(3) COMBINED SEWER OVERFLOW

Occurs when a single collection pipe is used to convey both storm runoff and sanitary wastes. During heavy rains or snowmelts, the overflow, which includes sewage, is discharged into a nearby water body. Provide the location and dates of the overflows and number of times MassDEP was notified of overflow release in the past year. Overflows as predicted by modeling will be accepted if contained in MassDEP approved reports. Points may be given when the collection system has documented incidents of CSO, and the project

includes work on the collection system or treatment works that will potentially reduce the risk of CSO events. Projects rarely receive points as both a CSO and a SSO. If both, please explain.

(4) WIDESPREAD SEPTIC SYSTEM FAILURE

Occurs when service area suffers 15% or more on-site septic system failures due to hydraulic breakout and/or direct discharge to groundwater. Provide board of health report or reports from local sewer authority, and street or lot location for each system breakout. Only the following scenarios will be indicative of failure: actual Board of Health documented failures, properties with pumping rates of 2 or more per year, and very small lots (< ¼ acre if private well on-site and < 5,000 SF if public water is available).

Lesser points are given if 10% or more of on-site septic system are failures as described above.

(5) RAW SEWAGE BACKUP FROM MUNICIPAL SYSTEM

Chronic municipal sewer system surcharging causing sewage to back up into homes and/or private buildings. Provide board of health reports or reports from local sewer authority, date, and street address for each event.

Failing septic systems do not trigger this criteria.

(6) SANITARY SEWER OVERFLOW	>3/yr
" " "	>2/yr
" " "	>1/yr

A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer that occurs prior to the headworks of a treatment plant. Sanitary sewer overflows include:

- Overflows or releases of wastewater that reach waters of the United States
- Overflows or releases of wastewater that do not reach waters of the United States
- Wastewater backups into buildings that are caused by blockages of flow conditions in a sanitary sewer other than a building lateral. The proponent should submit report of occurrence and location.

Describe the type of flow. i.e., from manhole? Into public areas or basements?

Points may be given when the collection system has documented incidents of SSO, and the project includes work on the collection system or treatment works that will potentially reduce the risk of SSO events. Projects rarely receive points as both a CSO and a SSO. If both, please explain.

(7) WATER POLLUTION RELATED ODOR PROBLEM

Describe the cause/source of odors and report instances of complaints.

Distances from source

Status of odor control equipment

(8) LANDFILL LEACHATE

Report the extent of the plume, identify wells affected or other receiving waters affected and provide sampling/analysis of contaminants and whether drinking water MCLs are exceeded.

(9) PUBLICLY OWNED TREATMENT WORKS MALFUNCTION

Malfunctions are considered to be malfunctions of major process units or collection systems that affect permit limits. Also, a facility that does not meet permit limits would be considered as having a malfunction due to lack of appropriate treatment processes.

Proponent should report history of malfunctions and note any and all NPDES limits exceeded.

(10) OTHER

MassDEP has included usual contributing causes, but will entertain arguments for additional public health causes, such as may exist in individual situations. MassDEP reserves the right to accept or reject any arguments advanced on this question and assign points as deemed appropriate. Points can only be issued to this item if justification for it is not covered by any other category.

II. What is the nature of the resource affected?

Please note that for questions 11-36 applicants can receive half the allotted points for preventive approaches versus remedial approaches. It is MassDEP's opinion that preventive approaches are important but not as critical as remediating existing problems.

The number of people exposed to pollutants as well as the means of those exposures are important determinants in the rating system. MassDEP seeks information to help determine the extent of the exposure. On the project site map noted in the previous section show location of resources affected (public and private drinking water supplies, private homes, public streets and parklands, etc.)

Explain how resources are being affected and to what degree by providing documentation (Watershed Management Plan, CWMP, PER, sampling and lab results, Board of Health records, etc). As a proponent, you must attempt to make direct connection between resources affected and documentation submitted.

Definitions of items in Section B.II:

(11) PUBLIC DRINKING WATER SUPPLY as defined in 310 CMR 22.02 (found on the MassDEP Web site at <http://www.mass.gov/dep/service/regulations/310cmr22.pdf>) 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 point or within the Zone II at a MassDEP-DWP-approved monitoring location. In the case of nitrogen contamination, total N of 5 ppm or greater would demonstrate the existence of 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 groundwaters are drawn.

Document all potential hydrogeological impacts to a public drinking water supply.

(12) 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. Is there any option for residents to connect to any other source?

(13) 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 should be presented. BOH reports, or reports from the local sewer authority are acceptable documentation.

(14) 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 BOH or the local sewer authority should be supplied.

(15) SWIMMING AREAS. A designated swimming area that is posted, maintained, and monitored by a health or recreation agency, that the problem to be corrected, has a documented closure(s) and the project has a potential impact on the closing of these areas.

(16) BOATING AREAS. An area of the affected water body that has identified public access points and documented impact on these locations.

(17) SENSITIVE POPULATION AFFECTED. This refers to a concentration of population which would be expected to be particularly at-risk via exposure. Applicable populations would be schools, nursing homes and hospitals served by a private well, or whose grounds are affected directly by contamination.

(18) POPULATION AFFECTED. The project specific population immediately impacted or served by the proposed project. Explain the parameters of the population selected.

(19) OTHER

MassDEP has included usual receiving resources, but will entertain arguments for additional public health resources affected, such as may exist in individual situations. MassDEP reserves the right to accept or reject any arguments advanced on this question and assign points as deemed appropriate. Points can only be issued to this item if justification for it is not covered by any other category.

Section C Environmental Criteria

I. What is the nature of the environmental problem encountered?

Briefly and in narrative form, describe the nature of any problems identified in the checklist, discussing the manner in which the problem affects the resource(s) noted. Describe the frequency and magnitude of the recurring problem. **Provide documentation, in the form of published reports of Municipal, Local, State or Federal entities engaged in environmental protection. Laboratory results are also acceptable. Please provide specific page references within any planning document or laboratory report submitted in support of the PEF. Note only those items that you can show to be within the project area and directly affected by water pollution. Proponents should note on the project site map where the resources are located. Note that any item that does not include documentation within the application will not receive points.**

Definitions of items in Section C.I:

(20) NPDES PERMIT EXCEEDANCE. It should indicate that they would only receive points if the proposed project impacts permit limits. An example would be upgraded disinfection to meet bacterial limits.

(21) AQUATIC TOXICITY. Project should address either (a) applicable permit limit violations or (b) receiving water toxicity problem. The 303(d) list includes aquatic toxicity as an impairment for some waterbodies. PEF should make connection between project and decrease in toxicity (example: addition or upgrading of dechlorination). 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.

(22) NUTRIENTS. Defined as either (a) applicable permit limit issue (upcoming or existing) and/or (b) receiving water nutrient 303(d) impaired water for nutrients (example: upgrading to address phosphorus from WWTF or sewerage an area upstream of a 303(d) list nutrient impaired pond).

(23, 24) DISSOLVED OXYGEN and TEMPERATURE. PEF should show temperature or DO problem in receiving water and must demonstrate that the proposed project will address/mitigate problem.

(25) BACTERIA

The presence of coliform bacteria in a drinking water source, or E. coli, other coliform bacteria, or enterococcus in a water body, as determined with analytical data. The 303(d) listing of “pathogens” is acceptable data. The information presented in the PEF should provide the data and the relevant limit exceeded or threatened (permit limit, drinking water 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.

(26) TURBIDITY

Suspended particles, usually sediment, 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 phosphorous to reduce alga growth. CSO and SSO situations are presumed to cause turbidity problems.

(27) NOXIOUS AQUATIC PLANTS

For the purposes of this PEF, “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, TMDL reports/recommendations, or MassDEP Assessment reports. Proposed project must in some manner mitigate the noxious weed problem.

(28) 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 have an aesthetics concern. Other demonstration of aesthetic concerns should include photos (unless odor), with accompanying report and date, location and person observing the problem. Official town reports are the appropriate documentation.

(29) OTHER

MassDEP has included usual environmental problems encountered, but will entertain arguments for additional causes to environmental problems, such as may exist in individual situations. MassDEP reserves the right to accept or reject any arguments advanced on this question, and assign points as deemed appropriate. Points can only be issued to this item if justification for it is not covered by any other category.

II. What environmental resources are affected?

(NOTE: PLEASE DELINEATE AFFECTED RESOURCE AREA ON PROJECT MAP)

Definitions of items in Section C.II:

(30) PUBLIC WATER SUPPLY- ZONE A is defined at 310 CMR 22.02 (found on the MassDEP Web site at <http://www.mass.gov/dep/service/regulations/310cmr22.pdf>). Generally it is the protected area in closest proximity with a surface 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 A and if the project will address documented issues in this area.

(31) PUBLIC WATER SUPPLY- ZONE I is defined at 310 CMR 22.02. Generally it is the protected area in closest proximity to a groundwater 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 I and if the project will address documented issues in this area.

(32) OUT STANDING RESOURCE WATER (ORW) is defined at 314 CMR 4.0 (found on the MassDEP Web site at <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>). These waters include public water supplies and their tributaries. Vernal pools and waters protected by Special Legislation are ORWs. Proponent must demonstrate an impact to the ORW from a water quality problem within the project area.

(33) AREAS OF CRITICAL ENVIRONMENTAL CONCERNS (ACEC): EOEEA designates ACECs within the Commonwealth. These areas include marshlands, embayments, unique habitats, and swamps. The proponent must clearly show that it pollution source(s) have a direct and adverse impact on the ACEC.

(34) PUBLIC WATER SUPPLY ZONE B is defined at 310 CMR 22.02. Generally this 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 and if the project will address documented issues in this area.

(35) PUBLIC WATER SUPPLY ZONE II is defined at 310 CMR 22.02. Generally this 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 and if the project will address documented issues in this area.

(36) COMMERCIAL FISHERY/SHELLFISH AREA. There are 303 shellfish growing areas designated by DMF, with 6 classifications ranging from “Approved” to “Prohibited”. There are also datalayers in MassGIS for “Designated Shellfish Growing Areas” and “MA DMF Lobster Harvest Zones”. Proponent will have to demonstrate that water quality improvement due to project implementation may result in expansion of area available for harvesting, or extend periods when beds/areas are open.

(37) ENDANGERED SPECIES HABITAT. Areas identified in the Massachusetts Natural Heritage Atlas (available at Conservation Commissions). There are also datalayers in MassGIS, but they are only available by special request to NHESP. Points will be given if the project area is within the Endangered Species Habitat area and if the project will address documented issues in this area.

(38) SOLE SOURCE AQUIFER. The 7 SSAs designated by US EPA. Shown as the “EPA Designated Sole Source Aquifers” datalayer of MassGIS. Proponent will have to successfully argue an impact to the aquifer resulting from the water quality problem.

(39) OCEAN SANCTUARY. The 5 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 projects where water enters the designated Ocean Sanctuary pre-project, and water quality is improved through the project. Discharge does not need to be directly into an ACEC.

(40) RECREATIONAL FISHERIES/SHELLFISH AREA

Project area would include a water body whose uses have historically included recreational fishing or shellfishing. Implementation of the project would have to be expected to improve water quality sufficiently to allow for a return or expansion of the fish population.

(41) FEDERALLY DESIGNATED RIVER

Certain Federal designations impart a higher level of significance to those rivers so designated. The proposed Project would have to have a direct impact on the water quality of a federally designated river. Federal designations include Wild and Scenic, and Natural Heritage. **MassDEP has expanded this category to include rivers wherein stocking of Atlantic Salmon is conducted, namely the Merrimack and the Connecticut and their tributaries.** Generally, only communities bordering the main stem of the designated river are considered to have the potential for direct impact.

(42) OTHER

MassDEP has included usual environmental resources, but will entertain arguments for additional environmental resources affected, such as may exist in individual situations. MassDEP reserves the right to accept or reject any arguments advanced on this question and assign points as deemed appropriate. **(Note: Please delineate affected resource area on project map.)** MassGIS maintains data layers for ACECs, ORWs, Surface Water Supply Protection Areas, and MassDEP Wellhead Protection Areas. Points can only be issued to this item if justification for it is not covered by any other category.

Section D Project Effectiveness - Note that any item that does not include documentation within the application will not receive points.

(43) How and to what extent will the project eliminate or mitigate the problem?

In the previous sections you discussed the nature of the environmental and public health problems as well as the impacts of those problems upon resources. In a brief narrative, describe how the project that you have proposed will specifically impact upon the resources and problems that you have noted. Describe how the

LGU has the jurisdiction and overall ability to implement the solution described. MassDEP expects that a competitive proposal will thoroughly address applicable items below, to the best of the applicant's ability:

- a) Reduce violations of water quality standards;
- b) Restore designated uses;
- c) Reduce potential adverse impacts to sensitive environmental resources;
- d) Protect designated uses;
- e) Reduce or eliminate public health problems or nuisances;
- f) Protect public health resources from contamination; and/or
- g) Address pollution sources other than those being addressed by the project, that contribute to the problem.

The proponent's ability to tie an effective corrective action to the problems and impacts listed previously will be determined in this section. The rating points assessed to this section have significant weight, therefore the more complete the response, the higher scoring the proponent may expect in this category.

Section E Program and Implementation Criteria - Note that any item that does not include documentation within the application will not receive points.

(44) Consistency with EOEEA/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 proponent will indicate the extent to which the LGU has explored and considered various options available. Points are awarded only for one planning category.

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, for example (but not limited to) an EOEA Watershed Management Plan; a Comprehensive Wastewater Management Plan (CWMP), a Project Evaluation Report (PER), 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 44.08 (found on the MassDEP web site at <http://www.mass.gov/dep/service/regulations/310cmr44.pdf>) to determine whether the planning satisfies the criteria for comprehensive wastewater management planning. Facilities plans or comprehensive wastewater management plans more than 15 years old (completed before 8/31/94 and not updated) 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. Attach pertinent sections of the planning document that support the proposed project.

Points may be issued for planning documents that are approved or considered "approvable" by MassDEP.

(45) Compliance and enforcement

Indicate if the project is related to any regulation, permit or enforcement action. In a table like the one below, list any regulations, permits, or enforcement actions that apply, including federal administrative orders, MA administrative orders, MA NON's, federal permits, MA permits, federal regulations, and MA regulations. List the type of action, subject matter, reference number, appropriate section/page related to this project and deadlines for compliance.

Type of Action	Subject	Reference Number	Section & page	Compliance Deadline(s)
EXAMPLE: Fed. Adm. Order	Order for action pursuant to Sec 308 of Clean Water Act re: CSOs	#97-02	Sec 4 & 6, p.5-8	May 2002 June 2002
EXAMPLE: NPDES Permit	NPDES permit for WWTP discharge permit limit for toxicity	9701234	Sec II and III, p.6-9	As of 6/1/97
EXAMPLE: NON	Surcharging of sewer @ E. Main	WE-98-NON-1001	p.2	As of 6/1/98
EXAMPLE: MA Reg. 314 CMR 5.00	Groundwater discharge re: stormwater needling permit	Not applicable	Sec 5.04, pp185,186	N/A

Explain how compliance with the above action will address the environmental problem identified in the previous sections. Describe the specific tasks identified in the enforcement action that will eliminate or mitigate the problem.

Voluntary compliance also applies to this item.

(46) Multi-community or regional solution

Indicate 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.

Points are available for projects that include significant I/I or stormwater recharge. The points given vary depending on whether it is in (a) a high or medium stressed basin or (b) a low stress basin so the applicant should note the stress level of basin. Also points similar to those for recharge in a high or medium stress basin should be given for those in a portion of a low stress basin that has localized stress conditions mentioned in the applicable water Management Act permit. See this site for listing of stressed basins: http://www.mass.gov/envir/mwrc/pdf/massachusetts_stressed_basins.pdf

(47) Innovative /Alternative technology

Indicate whether, and to what extent, the project utilizes MassDEP-approved innovative/alternative technology to effectively address the identified environmental problem.

(48) Pricing system under MGL c.40, s.39J

Has the LGU implemented a pricing system for sewer services in accordance with the provisions of MGL c.40, s.39J? If so, attach a copy of the pricing system and certification that the LGU has adopted the provisions of MGL c.40, s.39J to the PEF submittal. A proponent who does not supply a copy of the certification to Ch 40 will receive no credit for this response.

Section F Green Projects - Note that any item that does not include documentation within the application will not receive points.

I. Energy Efficiency

(49) Relative benefit of the project. Indicate if the project was recommended by a third party audit, assessment or feasibility study. Projects resulting from an audit/assessment/study will receive double the number of points for projects without energy audits. Projects discovered by other means (e.g. internal or other methods) may be eligible for the additional points provided sufficient documentation is included to

consider the method as a legitimate audit/assessment. 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. Projects which reduce energy consumption over 25% will get points for “Substantial 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”.

II. Renewable Energy

(50) Relative benefit of the project. Indicate if the project was recommended by a third party 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. Projects discovered by other means (e.g. internal or other methods) may be eligible for the additional points provided sufficient documentation is included to consider the method as a legitimate audit/assessment. 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 (CHP), calculate the expected renewable energy production benefit. Projects which produce over 50% of demand will get points for “Substantial 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”.

Section G Threshold Criteria

Items 51 and 52 are self explanatory.

Section H Qualifying Green Projects

(53) EPA requires that a portion of the capitalization grants to fund the SRF programs be targeted to green projects or components of projects. A large portion of MassDEP SRF projects either are considered a green project per EPA definition or contain elements that are considered green. It is necessary that all green components be identified by the time of the issuance of the draft Intended Use Plan to assure that the minimum target requirements will be obtained during project implementation. Following is a listing of the various project components that EPA has identified as qualifying for green status. Certain of these project components might require a business case to demonstrate that the project component qualifies for green status. Guidance and examples of what is considered “green” can be found in the following documents:

- “American Recovery and Reinvestment Act Guidance” Attachment 7 and 8, EPA, March 2, 2009
http://water.epa.gov/aboutow/eparecovery/upload/2009_03_31_eparecovery_STIMULUS_Guidance_Green_Reserve-2.pdf
- “The Green Project Reserve” EPA, January 4, 2010.
<http://water.epa.gov/aboutow/eparecovery/upload/GPR-q-and-a1-rev01042010.pdf>
- “Energy Efficiency Business Case for Wastewater Pumping Systems for Green Project Reserve”, EPA, 5/14/09.
http://water.epa.gov/aboutow/eparecovery/upload/2009_06_04_eparecovery_STIMULUS_Green_business_case_on_pumping.pdf

Following is what an applicant needs to do:

- An applicant will be required to identify each component of its project that may be considered green. Certain components require a business case to determine if it qualifies for green status. We do not require that you develop the business case at this time. The business case will be performed during the loan application stage. However, the component requiring the business case should be reported as a possible green component.
- At the applicant's option, the applicant can submit this information with the PEF submission or may defer its submission until requested by MassDEP.
- If the applicant decides to submit the information with the PEF, then they should determine each component of the project that meets each of the green components from the following list. The code for each green component should be entered in line 54(a) on the Clean Water PEF.
- An approximate estimate of the value of the green work, expressed either as a percentage of the entire project costs or as a dollar value should be reported on line 54(b or c) in the Clean Water PEF. We recognize that these are gross approximations; one should not expend considerable time at arriving at these figures, but rather use their best professional judgment. The actual costs for the green components will be refined at the time of contract bid and award.

RE1	Renewable energy installation not classified elsewhere (explain in narrative/text)
RE2	Wind Turbine installation
RE3	Solar photovoltaic array installation
RE4	Solar hot water installation
RE5	Geothermal installation
RE6	Hydroelectric turbine
RE7	Combined Heat and Power system – digester gas fueled microturbine or reciprocating engine
RE8	Fuel cell installation
EE1	Energy efficiency measure not classified elsewhere (explain in narrative/text)
EE2	Costs to perform an Energy Audit
EE3	Purchase and installation of highest or higher efficiency HVAC system (i.e. boiler, AC, heater)
EE4	Purchase and installation of premium motor for blower or pump
EE5	Purchase and install variable speed drive or variable frequency drive
EE6	Purchase of leak detection equipment for treatment works
EE7	Retrofit/upgrade of wastewater treatment processes
EE8	Modification/retrofit or replacement of wastewater pumping systems resulting in greater than 20% increase in energy efficiency (requires future submittal of a Business Case)
EE9	Lighting upgrades at treatment plant or pump station, including bulb changes, occupancy sensors, or lighting control systems
EE10	LEED certification
EE11	Building envelope retrofit/upgrades (insulation, windows, etc.)
EE12	Passive lighting, new building
EE13	Passive lighting retrofit (e.g. skylights)
EE14	Passive heating and cooling
EE15	Install most efficient generator (TIER 4) for backup power
EE16	Control system, new installation
EE17	Control system, retrofit or upgrade (i.e. SCADA, replace pneumatic controls, thermostats, etc.)
EE18	Aeration system retrofit or upgrade
EE19	Install turboblower
EE20	Install dissolved oxygen monitoring and automated control
EE21	Construction of a CWA §212 POTW: Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
EE22	Construction of a CWA §212 POTW: Building activities that implement capital water efficiency projects.

EE23	Implementation of a CWA §319 State Nonpoint Source Management Plans: Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
EE24	Implementation of a CWA §319 State Nonpoint Source Management Plans: Building activities that implement capital water efficiency projects.
EE25	Development or Implementation of a CWA §320 Comprehensive Conservation Management Plan: Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
EE26	Development or Implementation of a CWA §320 Comprehensive Conservation Management Plan: Building activities that implement capital water efficiency projects.
WE1	Water efficiency measure not classified elsewhere (explain in narrative, needs Business Case)
WE2	Purchase and installation of water efficient fixtures, fittings, equipment, or appliances (e.g. toilets, faucets, showers, etc.) on Town/City property
WE3	Retrofit or replacement of existing water using fixtures, fittings, equipment or appliances with more efficient equipment on Town/City property
WE4	Purchase of water efficient fixtures, fittings, equipment or appliances as part of Town/City-wide rebate program
WE5	Purchase of leak detection devices and equipment
WE6	Purchase and installation of water meters, meter reading equipment and systems and pipe, for a previously unmetred area
WE7	Purchase/install replacement water meters and meter reading equipment (needs Business Case)
WE8	Construction and installation activities that implement capital water efficiency projects.
WE9	Install/retrofit of efficient landscape or irrigation equipment for publicly owned facilities.
WE10	Install system to recycle gray water
WE11	Installation of dual pipe distribution systems as a means of lowering costs of treating water to potable standards
WE12	Replacement or rehabilitation of distribution lines (requires future submittal of business case)
WE13	Development of Comprehensive Wastewater Management Plan
WE14	Development of Integrated Water Resource Management Plan
WE15	Development of a water conservation plan
WE16	Costs associated with development of a water conservation plan if required as a condition of SRF assistance
WE17	Public Education: development or implementation of programs on conservation
WE18	Incentive Programs (e.g., rebates, tax breaks, vouchers, and conservation rate structures) DEVELOPMENT
WE19	Incentive Programs (e.g., rebates, tax breaks, vouchers, and conservation rate structures) IMPLEMENTATION
WE20	Incentive Programs (e.g., rebates, tax breaks, vouchers, and conservation rate structures) ADMINISTRATION
WE21	Technical assistance to systems on how to conserve water (e.g., water audits, leak detection, and rate structure consultation)
WE22	Development and implementation of ordinances or regulations to conserve water
WE23	Drought monitoring
WE24	Construction of a CWA §212 POTW: Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
WE25	Construction of a CWA §212 POTW: Building activities that implement capital water efficiency projects.
WE26	Implementation of a CWA §319 State Nonpoint Source Management Plans: Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
WE27	Implementation of a CWA §319 State Nonpoint Source Management Plans: Building activities that implement capital water efficiency projects.
WE28	Development or Implementation of a CWA §320 Comprehensive Conservation Management Plan:

	Planning and Design of water efficiency projects that are reasonably expected to result in a capital project.
WE29	Development or Implementation of a CWA §320 Comprehensive Conservation Management Plan: Building activities that implement capital water efficiency projects.
SW1	Stormwater efficiency measure not classified elsewhere (explain in narrative, needs Business Case)
SW2	Implement Green Streets (combinations of green infrastructure practices in transportation rights-of-ways) for new development, redevelopment or retrofits
SW3	Implement water reuse or water harvesting programs
SW4	Installation of green roof(s)
SW5	Downspout disconnection program (to remove stormwater from combined sewers and storm sewers)
SW6	Implement wet weather management system for PARKING AREAS, such as incremental cost of porous pavement, bioretention, green roofs, trees, and other practices that mimic natural hydrology and reduce effective imperviousness
SW7	Hydromodification to restore riparian buffers, floodplains or wetlands
SW8	Implement comprehensive street tree or urban forestry programs (expand tree boxes, etc.)
EI1	General project that demonstrates new and/or innovative approach to managing water resources in a more sustainable way, including projects that achieve pollution prevention or pollutant removal with reduced costs (requires future submittal of a Business Case)
EI2	Green infrastructure/low impact development stormwater projects
EI3	Wetland restoration and constructed wetlands
EI4	Decentralized wastewater treatment solutions to existing deficient or failing on site systems
EI5	Water reuse projects that reduce energy consumption, recharge aquifers or reduce waster withdrawals and treatment costs
EI6	The water quality portion of projects that employ development & redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.
EI7	Projects that use water balance approaches (water budgets) at the project, local or state level that preserve site, local or regional hydrology. Such an effort could showcase efforts to plan and manage in a concerted manner, surface and groundwater withdrawals, stream flow (aquatic species protection), wetland and floodplain storage, groundwater recharge and regional or local reuse and harvesting strategies using a quantified methodology.
EI8	Projects that facilitate adaptation of clean water programs and practices to climate change.
EI9	The water quality portion of projects that demonstrate the energy savings and greenhouse reduction benefits of sustainable site design practices and the use of green stormwater infrastructure.
EI10	Projects that identify & quantify the benefits of using integrated water resources management approaches.
EI11	Projects that incorporate differential uses of water based on the level of treatment to reduce the costs of treating all water to potable water standards.