



# 2023 Drinking Water Construction Project Evaluation Form

**Project No** DWSRF-10380

**ReSubmitted Project No**

**Applicant (PWSID)** 2316000

**Local Government Unit** WEBSTER  
350 Main Street  
Webster MA 01570  
508-949-3800

**Authorized Representative** Tom Cutler, Water Sup.  
PO Box 793  
Webster MA 01570  
508-949-3800  
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**Consultant Firm** Tighe & Bond  
**Primary Consultant Contact** Jeffrey Faulkner, Senior PM  
120 Front Street  
Worcester MA 01608  
508-471-9620  
JAFaulkner@tighebond.com

**Project Name** PFAS WTPs and Meter System Upgrades

**Project Description** This is a Tier V project involving the construction of two new PFAS water treatment plants and a meter system upgrade project. The WTPs will remove PFAS to below regulatory limits from both the Memorial Beach and Bigelow Well Sites. The proposed new WTP at the Bigelow site will also remove manganese to below regulatory limits. Two replacement wells will also be installed to improve system redundancy. The water meter upgrade project will significantly reduce the Town's unaccounted for water (UAW).



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## Project Schedule and Costs for Construction Project:

**Planning Report Title** PFAS Treatment Siting Analysis Attachment A

**Report Date** 07/05/2022

**Design/Plan Start Date** 02/01/2022

**Design/Plan End Date** 03/01/2024

**Is this proposed project subject to Massachusetts Environmental Policy Act (MEPA) review?** YES, subject to MEPA, proposed submittal date

**MEPA Review Date** 03/01/2023

**Has this proposed project been submitted to the Massachusetts Historical Commission (MHC)?** No, Has not been reviewed.

**Loan Application Submittal date** 10/13/2023

Project Costs				
Cost Type	Start Date	End Date	Total Cost	Eligible Cost
1: Two WTPs	07/01/2024	05/01/2026	\$27,700,000.00	\$25,700,000.00
2: Water Meters	07/01/2024	05/01/2026	\$3,550,000.00	\$3,500,000.00
Construction Contingency at 10% Cost			\$3,700,000.00	\$3,700,000.00
Construction Services Cost			\$2,050,000.00	\$2,050,000.00
Total			\$37,000,000.00	\$34,950,000.00

## Local Funding Authorization:

**Identify the governing body empowered to commit funding:** Town of Webster

**Identify the type of action required to authorize funding:** Town Meeting Vote

**Has local funding been authorized?** No

**Please enter date of authorization and include a certified copy of the appropriation document:**

**Please enter authorized amount.**

**Please enter planned date of authorization** 05/31/2023

## Other Assistance:

**Are you seeking, or have you been awarded, a loan and/or grant from another program for this project or a portion thereof?** No



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## Project Narrative/Checklist

A detailed discussion of the problem to be solved by the project.	Yes
Identification of project area using site plan and/or locus map.	Yes
A detailed discussion of the severity of the existing public health issues due to the problem.	Yes
The total system population affected by the project, and how the affected population is calculated.	Yes
A discussion of all interactions with regulatory bodies pertaining to the problem, including the need to comply with existing enforcement orders or sanitary survey requirements.	Yes
A detailed discussion of the work to be completed.	Yes
A description of the relative importance of the component(s) involved.	Yes
A description of the energy efficiency measures, if any, to be implemented and anticipated energy savings.	Yes
A description of the back-up systems currently in place to replace the component(s) on a temporary or permanent basis.	Yes
A description of all the planning efforts performed in arriving at the recommended plan.	Yes
A discussion of other options considered, including the "no action" option.	Yes
A discussion of the status of the implementation process that currently exists.	Yes

Description		Score
<b>Part IV - Project Ranking</b>  <b>Tier Classification</b>  <b>1. Project Tier</b>  Based on the Tier descriptions presented in the Instruction and Guidance document, what Tier do you believe best characterized your project?  <i>Consultant Note: This project proposes two PFAS Water Treatment Plants to address PFAS levels that exceed the MCL in water from Bigelow Road Pump Station and that are close to meeting the MCL in water from both Memorial Beach pump stations. The project also includes water meter upgrades that will decrease unaccounted for water and also increase revenue from under registered meters thereby offsetting some of the costs for the proposed treatment plants.</i>	Not requested or Not documented	0
	Tier I	100
	Tier II	200
	Tier III	300
	Tier IV	400
	Tier V	500
	<b>Scored Point</b>	<i>Consultant: 500</i>



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<p><b>a)</b> If this is a Tier V project, is there Water Main repair/replacement including full lead service for lead service line replacement (Main to water meter)?</p> <p><i>Consultant Note: No</i></p>	Answer with note in comments	0
	<b>Scored Point</b>	<i>Consultant: 0</i>
<p><b>2. Water Quality</b></p> <p><b>a)</b> Does the proposed project address serious existing water quality and/or treatment technique issues?</p> <p><i>Consultant Note: Yes, this will be treating water from pump stations that are above and close to meeting the MCL for PFAS and above the SMCL for manganese. Page 4 of Project Narrative.</i></p>	Answer with note in comments	0
	<b>Scored Point</b>	<i>Consultant: 0</i>
<p><b>b)</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.</p> <p><i>Consultant Note: Yes, the PFAS MCL is exceeded at Bigelow Road Pump Station No. 3 and Manganese SMCL at Bigelow Road Pump Station No. 3. Page 4 of Project Narrative.</i></p>	Answer with note in comments	0
	<b>Scored Point</b>	<i>Consultant: 0</i>



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<b>c)</b> 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?  <i>Consultant Note: Yes, at Pump Station No. 3. Page 4 of Project Narrative.</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
<b>d)</b> Has the running annual average (RAA) exceeded 80%?  <i>Consultant Note: Yes, at Pump Station No. 3. Page 4 of Project Narrative.</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
<b>3. Documented Actions</b>  Does the proposed project address deficiencies found during a sanitary survey or other Mass DEP documented actions?  <i>Consultant Note: Yes, the project addresses a NON. NON documentation is included in the project narrative as Attachment C.</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>



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Check list: Please indicate if any of the following are attached to your PEF.

**a) Emergency Response Logs**

*Consultant Note: No*

Answer with note in comments

0

**Scored Point**

*Consultant: 0*

**b) Emergency Repair Logs**

*Consultant Note: No*

Answer with note in comments

0

**Scored Point**

*Consultant: 0*

**c) Enforcement Documentation**

*Consultant Note: Yes, NON documentation is included in the Project Narrative as Attachment C.*

Answer with note in comments

0

**Scored Point**

*Consultant: 0*

**d) Engineering Report**

*Consultant Note: Yes, a Siting Analysis is included in the Project Narrative as Attachment A.*

Answer with note in comments

0

**Scored Point**

*Consultant: 0*



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e) Hydraulic Study  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
f) Inventory Report (include life expectancy of components)  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
g) Leak Detection Reports  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
h) Master Plan (excerpts)  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
i) Photos of tuberculated pipe or pipe coupons  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>



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j) Renewable Energy Feasibility Study  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
k) Sanitary Survey Report (applicable sections)  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
l) Tank Inspection Report  <i>Consultant Note: No</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>
m) Water Quality Results  <i>Consultant Note: Yes, PFAS test results are included in the Project Narrative as Attachment G.</i>	Answer with note in comments	0
	Scored Point	<i>Consultant: 0</i>





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<p>n) Other</p> <p><i>Consultant Note: A Bench Scale Testing Report is included in the Project Narrative as Attachment F.</i></p>	<p>Answer with note in comments</p>	<p>0</p>
	<p><b>Scored Point</b></p>	<p><i>Consultant: 0</i></p>
<p><u>Assignment of Additional Points</u></p> <p><b>1. Population Affected by the Project</b> (as justified in the narrative):</p> <p><i>Consultant Note: The Webster Water Department serves approximately 16,767 people. Page 6 of Project Narrative.</i></p>	<p>Not requested or Not documented</p>	<p>0</p>
	<p>25 to 3,299</p>	<p>5</p>
	<p>3,300 to 9,999</p>	<p>10</p>
	<p>10,000 to 99,999</p>	<p>15</p>
	<p>100,000 and above</p>	<p>20</p>
	<p><b>Scored Point</b></p>	<p><i>Consultant: 15</i></p>
<p><b>2. Energy Efficiency and Renewable Energy Efficiency:</b></p> <p>a) Do you have an audit or feasibility study for the energy component?</p> <p><i>Consultant Note: No</i></p>	<p>Project will result in energy efficiencies without audit</p>	<p>4</p>
	<p>Project will result in energy efficiencies with audit</p>	<p>7</p>
	<p>Not requested or Not documented</p>	<p>0</p>
	<p><b>Scored Point</b></p>	<p><i>Consultant: 0</i></p>
<p>b) Do you have a feasibility study for the proposed renewable energy?</p> <p><i>Consultant Note: No</i></p>	<p>Not requested or Not documented</p>	<p>0</p>
	<p>Project will result in on-site renewable energy power generation without feasibility study</p>	<p>4</p>
	<p>Project will result in on-site renewable energy power generation with feasibility study</p>	<p>7</p>
	<p><b>Scored Point</b></p>	<p><i>Consultant: 0</i></p>



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## 3. Affordability

a) Does the system's service area have a median income of \$67,508 or less? (That is, 80% of the 2016-2020 State Median Household Income (MHI) of \$84,385.)

To answer this question, Applicants may use the MHI prepared by the Massachusetts Department of Housing & Community Development based on [U.S. Census Bureau data](#) for the most appropriate city, town, or census designated place. 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 the application.

*Consultant Note: Webster's MHI is \$50,036 and is 59% of the state median. Page 6 of Project Narrative.*

Not Requested or Not Documented	0
Yes	8
<b>Scored Point</b>	<i>Consultant: 8</i>

b) Will the rates to the end users, after implementation of the project, exceed 1% of the median household income of the service area? If so, indicate which range below best describes the resultant rate. Provide supporting documentation of current residential rates.

*Consultant Note: A full rate study has not yet been completed but we anticipate the resultant rate to be greater than 1.75%*

Not Requested or Not Documented	0
Resultant rate 1.0% to 1.249% of MHI	2
Resultant rate 1.25% to 1.499% of MHI	4
Resultant rate 1.5% to 1.749% of MHI	6
Resultant rate greater than 1.75% of MHI	8
<b>Scored Point</b>	<i>Consultant: 8</i>

c) EJ communities (either affected by it, or serviced by project)

*Consultant Note: Yes, using the MassDEP EJ population map, Block Group 1 had the criteria of minority and income, Block Group 2 had the criteria of minority and income, and Block Group 3 had the criteria of minority and income. They will be serviced by the project. Page 6 of Project Narrative.*

Not requested or Not documented	0
Yes	1
<b>Scored Point</b>	<i>Consultant: 1</i>



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## 4. Consolidation/Restructuring

a) Does the project consolidate or restructure a PWS to eliminate a public health problem or capacity development problem?

*Consultant Note: No*

To take over 1-2 systems	2
To take over 3 or more systems	4
Not requested or Not documented	0
<b>Scored Point</b>	<i>Consultant: 0</i>

b) Is the applicant restructuring or otherwise preparing to consolidate with or take operation of one or more public water supply systems?

*Consultant Note: No*

Not requested or Not documented	0
Yes - Noted in plan (note how many in comments)	4
<b>Scored Point</b>	<i>Consultant: 0</i>

c) What is the reason for each proposed consolidation/takeover?

*Consultant Note: N/A*

Answer with note in comments	0
<b>Scored Point</b>	<i>Consultant: 0</i>

## 5. Compliance with Enforcement Order

a) Is the project needed to ensure compliance with a federal or state court or administrative order as of the PEF submittal date?

Please note the date of the order and describe the order and how the project will allow the system to comply in the narrative.

*Consultant Note: Yes, NON issued on October 6, 2021 for violating the PFAS6 MCL of 20 ng/L with a PFAS6 quarterly average of 22 ng/L at Pump Station No. 3 (03G). The project will treat PFAS in water Pump Station Nos. 1, 2, and 3 to ensure that PFAS levels are below the MCL.*

Achieves marginal compliance with enforcement order	0
Achieves moderate compliance with enforcement order	10
Achieves substantial compliance with enforcement order	20
<b>Scored Point</b>	<i>Consultant: 20</i>



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**b)** Is the project needed to come into or maintain compliance with 310 CMR 22.00, the SDWA, or other required or related federal or state permit or approval, including the Department's approval of a new drinking water source?

Please state the compliance need and describe how the project will enable the system to come into or maintain compliance in the narrative.

*Consultant Note: Yes, NON. Pages 3 to 8 of Project Narrative.*

Answer with note in comments

0

**Scored Point**

*Consultant: 0*

### 6. Wellhead Protection

**a)** Do you have a MassDEP approved source water protection plan?

*Consultant Note: Yes, Town of Webster Zoning Bylaws Section 650-24.*

Not requested or Not documented

0

Yes

4

**Scored Point**

*Consultant: 4*

### 7. New Technologies

**a)** Does the project include any of the "[new technologies](#)" approved by the MassDEP Drinking Water Program per the most recent published listing. (only within the past 5 years)

*Consultant Note: Yes, it is anticipated that the WTPs will include Calgon FILTRASORB for PFAS removal. Page 7 of project narrative.*

Not requested or Not documented

0

Yes

4

**Scored Point**

*Consultant: 4*



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**8. Best Management Practice (BMP)** as defined on the [Clean Water Trust's website](#)

**a)** Does the public water system have an asset management plan or a plan that is utilized for rehabilitation or replacement of water works and maintenance equipment?

*Consultant Note: Yes.*

Not requested or Not documented

0

Yes

4

**Scored Point**

*Consultant: 4*

**b)** Has the applicant adopted the BMP of Full Cost Pricing?

*Consultant Note:*

Not requested or Not documented

0

Yes

2

**Scored Point**

*Consultant: 0*

**c)** Has the applicant adopted the BMP of Enterprise Fund?

*Consultant Note: Yes, the Town of Webster has a water enterprise fund.*

Not requested or Not documented

0

Yes

2

**Scored Point**

*Consultant: 2*

**d)** Has the applicant adopted the BMP of Inter-Municipal Agreement (as Host Community)?

*Consultant Note:*

Not requested or Not documented

0

Yes

2

**Scored Point**

*Consultant: 0*

**e)** Has the applicant adopted the BMP of Leak Mitigation?

*Consultant Note: Yes, the Town conducts annual leak detection.*

Not requested or Not documented

0

Yes

2

**Scored Point**

*Consultant: 2*



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Total

Consultant: 568

## Files Uploaded

Project Narrative Webster.pdf

## Certification:

Certified By

Danielle Teixeira