

PROPOSAL

WATER CONSERVATION COMPETITIVE GRANT PROGRAM

FEDERAL FISCAL YEAR 2009

ADMINISTRATIVE SUMMARY

Address:	Town of Hatfield (Department of Public Works) 59 Main Street Hatfield, MA 01038
Telephone:	413-247-0499
Facsimile:	413-247-5029
Internet:	fmotyka@townofhatfield.org

PROJECT TITLE

Town of Hatfield Water Conservation Project

MUNICIPALITY AND WATERSHED(S) SERVED BY THIS PROJECT -

Town of Hatfield PWS #1127000 serving the Town of Hatfield

Do you have a Water Management Act Permit or Registration that requires meeting unaccounted-for water limits of 10% (UAW) or 65 residential gallons per capita day (rgpcd)? Yes ☐ No ☒

AMOUNT OF FUNDING REQUESTED AND AMOUNT AND PERCENT OF MATCH FUNDING PROPOSED

Federal Funds via MassDEP	\$40,000.00	
Match (25% required)	\$10,000.00	25% of Requested Grant Amount
Total Project Budget	\$50,000.00	

PROJECT SUMMARY/OBJECTIVES

This project consists of evaluation of the Town's rate structure to evaluate shifting to a conservation-oriented rate, replacement of meters (approximately 25) and testing/calibration of the Town's master meters.

PRINCIPAL CONTACT:

<u>Frank Motyka, Director of Public Works</u>	<u>(413) 247-0499</u>
Name and Title	Telephone
<u>fmotyka@townofhatfield.org</u>	<u>(413) 247-5029</u>
Internet	Facsimile

AUTHORIZED SIGNATORY:



Frank Motyka, Director of Public Works

Signature and Title required

Date 7/11/08

PROJECT DESCRIPTION

Provide a brief project description. This description may be in narrative form (*no more than three pages total*) or in the table format shown below.

Element	Definition
CONCISE STATEMENT OF THE PROBLEM	<p>The Town of Hatfield, located in the Mill River Basin, has made significant strides in the modernization of its water system. Most recently, the Town completed the following tasks under their Water Conservation Grant Project #06-14 WLP:</p> <ul style="list-style-type: none">• Conducted a water audit to reduce unaccounted for water• Conducted a comprehensive leak detection survey• Implemented a conservation education program in the Town's elementary schools• Evaluated the Town's largest water meters with regards to appropriate sizing and water accountability. <p>These efforts have reduced water losses down to 15% as reported for 2007. Additional measures are needed to try to achieve and maintain water losses in the 10% range. The Town is proposing a three-pronged approach aimed towards encouraging conservation and reducing water demands and losses, as follows:</p> <ul style="list-style-type: none">• Conduct a rate study, to evaluate a shift from the existing uniform rate structure to a conservation based rate structure.• Replacement of customer meters to increase water accountability.• Testing and calibration of the water system's master meters. <p>This grant is needed to help fund this project.</p>
PROJECT GOAL(s)	<p>The goals of this project are as follows:</p> <ul style="list-style-type: none">• To reduce water demands through implementation of a conservation based rate structure.• To reduce the unaccounted for water through increased water accountability at customer's meters.• To increase the overall system integrity and water accountability through testing and calibration of the master production meters.

PROJECT STRATEGY	<p>The project strategy for the three major goals is described as follows:</p> <ul style="list-style-type: none"> • Evaluate the Town's existing rate structure (uniform rate) and consider conservation-oriented alternatives. The Town will work with an outside consultant, Comprehensive Environmental Inc. (CEI), to evaluate the existing rate structure and associated fees. In order to establish the anticipated capital needs of the Town's water system, some master planning will be required. This master planning will focus on establishing the existing and projected deficiencies in terms of supply, storage and distribution. These anticipated capital improvements in conjunction with the Town's operations and maintenance costs will be the basis of the rate study. A letter report will provide recommendations for an alternative conservation-oriented rate structure. • Replacement of customer meters is anticipated to increase water accountability and is necessary for maximizing the benefits associated with a conservation-oriented rate structure. • Testing and calibration of the Town's master meters will provide for increased water accountability, in conjunction with the proposed replacement of customer meters.
MILESTONES	See the milestone schedule attached.
ACTIVITIES	<p>Specific activities to be performed under this grant are listed below and described in detail in the Scope of Services:</p> <ul style="list-style-type: none"> • Development of an alternative conservation-oriented rate structure in accordance with AWWA pricing guidance. • Replacement of approximately 25 customer meters. • Testing and calibration of the Town's master production meters.
PROJECT EVALUATION	<p>The project meets the following grant priority criteria:</p> <ul style="list-style-type: none"> • Encourage water conservation through development of an alternative conservation-oriented rate structure. • Maximize water accountability through ongoing replacement of customer water meters. • Maximize the overall system efficiency by testing and calibration of the Town's master production meters.

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SCOPE OF SERVICES

Provide a brief descriptive statement for each task/activity to be completed under the project, and list and describe the product(s) for each task. Provide an estimated cost for each task. Finally, every response must include reporting requirements (quarterly updates, final project reports, etc.) as a separate task. Attach additional pages as necessary to describe objectives/tasks.

TASK/OBJECTIVE # 1: **Rate Study**

The Town will evaluate the existing uniform rate structure and associated fees, in conjunction with historical customer meter records, to determine the effectiveness of the existing rate structure. Water Department expenditures and revenues will be obtained and reviewed for the past several years.

This task will also include an evaluation of the existing water system in terms of existing and anticipated deficiencies, in order to develop a Capital Improvement Plan. This Capital Improvement Plan will provide the basis for determining the financial needs of the Town, beyond the current and anticipated operating and maintenance costs.

Consideration will be given to potential changes in the meter reading/billing frequency. Presently, the Town reads meters and bills customers annually. Presently, this does not capture the peak use period as a distinct "cause and effect" between peak water use and cost. The feasibility of modifying this and the associated costs for any change in meter reading frequency will be considered in the development of alternative conservation-oriented rate structures.

The development of an alternative conservation-oriented rate structure will be based upon established pricing guidelines published by AWWA and EPA. The focus will be to establish a more direct connection between the peak water use by any particular customer and the associated financial impact to that customer.

DELIVERABLES: Report outlining the results of the rate study and recommended alternative rate structure.

ESTIMATED COST: \$37,500.00 **GRANT SHARE:** \$35,000.00 **MATCH SHARE:** \$2,500.00

TASK/OBJECTIVE #2: **Customer Meter Replacement**

The Town will replace approximately 25 customer meters during this project. The labor and materials associated with this task will serve as part of the project match share.

DELIVERABLES: List of meters replaced, with the locations and the dates of replacement.

ESTIMATED COST: \$5,000.00 **GRANT SHARE:** \$0.00 **MATCH SHARE:** \$5,000.00

TASK/OBJECTIVE #3: Testing/Calibration of Master Meters

The Town will test its master production meters for accuracy, and calibrate as necessary based upon the test results. The accuracy will be field verified by measuring actual flows in the distribution pipe leaving the respective source compared with the meter readings observed concurrently.

DELIVERABLES: Report documenting the master meters tested noting the test dates, locations, and results.

ESTIMATED COST: \$2,500.00

GRANT SHARE: \$0.00

MATCH SHARE: \$2,500.00

TASK/OBJECTIVE #4: Reporting**Quarterly Reporting**

The District will submit the following Deliverables to the Department in accordance with the Milestone schedule.

DELIVERABLES:

- Quarterly progress reports to the Department's Project Coordinator shall be submitted via email (Word 6.0 or other suitable software as determined by the Department) on a standard form provided by the Department and shall contain a summary and percentage of all work completed by task during the reporting period and planned activities for the next quarter.
- Quarterly financial reports including reimbursement forms, MBE/WBE utilization forms and match certification forms

Final Reporting

The District will submit the following Deliverables to the Department in accordance with the Milestone schedule.

DELIVERABLES:

- Two paper copies of a draft final report shall be provided to the Department's Project Coordinator for review and comment at least two months prior to the milestone schedule end date. The report will include a summary of the entire project, including methods, results and conclusions as well as recommendations on actions that should be taken to further reduce water losses and comment on the effectiveness of the project.
- The Final Report will calculate the environmental results of the project and quantify the water savings in both gallons of water and dollar value per year.
- Final report incorporating comments and including all project deliverables.
- One camera ready copy (unbound) and three (3) printed copies of the final report, and two (2) CDs with electronic versions of the final report which are compatible with the Department's systems (Word or searchable Adobe .pdf format)

ESTIMATED COST: \$5,000.00

GRANT SHARE: \$5,000.00

MATCH SHARE: \$0.00

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PROJECT BUDGET

This budget is for response evaluation purposes. Use the whole dollar method. Indicate which items will be paid for by grant funds, and which will be paid for by the match. Attach additional pages as necessary.

Expense Items	Grant Amount	Cost Share (Cash)	Cost Share (In-house)	Total Amount
Salary - By Title and Salary Range <i>(i.e.: Engineer, \$40-50/hr)</i> <i>Rate Study (Tax Collector, etc.)</i> \$2,500.00 <i>Meter Replacement</i> \$1,875.00	\$0	\$0	\$4,375.00	\$4,375.00
Subcontractual Services <i>Rate Study</i> \$40,000.00 <i>Master Meter Testing/Calibration</i> \$2,500.00 <i>Reporting</i> \$5,000.00	\$40,000.00	\$0	\$2,500.00	\$42,500.00
Equipment	\$0.00	\$0	\$3,125.00	\$3,125.00
Supplies (including printing, mailing - should include cost for printing 3 hard copies and 2 on CDs, at a minimum, of the final project report)	\$0.00	\$0	\$0	\$0.00
Other	\$0	\$0	\$0	\$0
Totals	\$40,000.00	\$0	\$10,000.00	\$50,000.00

SOURCE(S) OF MATCH - List all sources of match funds and the amount of matching funds being contributed by each source. Letters of support from all organizations (on the organization's letterhead) identified as providing a portion of the match for the project **must be submitted with the Response**. These letters must detail the match to be provided by the organization, and must be signed by an authorized signatory for the organization.

EEO/AA REQUIREMENTS - Identify all budget categories from which it is anticipated that the M/WBE participation goals will be met. Show the anticipated dollar amount of M/WBE participation in each budget category.

Note that \$40,000.00 of the Subcontractual Services is intended to go to a WBE, Comprehensive Environmental Inc.

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PROJECT MILESTONE SCHEDULE

Provide a time-line by "xing" out the duration of the task activity. Attach additional pages as necessary.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13
TASK #1	X	X	X	X	X	X							
TASK #2				X	X	X	X	X	X				
TASK #3				X	X	X	X	X	X				
TASK #4			X			X			X			X	X