

**Supporting Statement for Paperwork Reduction Act Submission
Part A**

**Study on Arsenic and Uranium in Bedrock Wells
of East Central Massachusetts
(MASSWELL)**

**OMB Control Number: 1028-NEW
Expiration Date: TBD**

General Instructions

A Supporting Statement, including the text of the notice to the public required by 5 CFR 1320.5(a)(i)(iv) and its actual or estimated date of publication in the Federal Register, must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified in Section A below. If an item is not applicable, provide a brief explanation. When Item 17 of the OMB Form 83-I is checked "Yes," Section B of the Supporting Statement must be completed. OMB reserves the right to require the submission of additional information with respect to any request for approval.

A. Justification

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.***

The U.S. Geological Survey (USGS) and the Massachusetts Department of Environmental Protection (MDEP) are conducting the study with assistance of staff from the Massachusetts Department of Public Health, Bureau of Environmental Health (MDPH/BEH) to assess:

- The number of private wells containing raw-water concentrations of arsenic or uranium that are greater than the current drinking water standards
- The degree to which bedrock units can be associated with concentrations of uranium and arsenic

The mission of the USGS Massachusetts-Rhode Island Water Science Center is to provide the hydrologic information and understanding necessary for the management and use of the Nation's water resources. The WSC fulfills this mission by: (1) Systematically collecting surface-water, ground-water, water-quality and biological data; (2) Conducting interpretive water-resources studies that respond to cooperator and national needs; (3) Developing innovative scientific approaches to various environmental processes and problems to improve our understanding of hydrologic systems; (4) Publishing water data and results of investigations in high-quality reports and (5) Assisting other governmental agencies and the public to understand hydrologic information relevant to the policies and management practices that affect the Nation's water resources.

The authority for this program is mandated by the Water Resources Research Act of 1984 (Public Law 98-242, Dated March 1984) as amended (42USC1031 et seq.), authorizes water research in each state and territory to:

"plan, conduct, or otherwise arrange for competent research that fosters (A) the entry of new research scientists into the water resources fields, (B) the training and education of future water scientists, engineers, and technicians, (C) the preliminary exploration of new ideas that address water problems or expand understanding of water and water related phenomena, and (D) the dissemination of research results to water managers and the public"

and

"cooperate closely with other colleges and universities in the State that have demonstrated capabilities for research, information dissemination, and graduate training in order to develop a statewide program designed to resolve State and regional water and related land problems."

Source: Public Law 98-242 - http://water.usgs.gov/wrri/WRRRA_of_1984_as_amended.pdf

- 2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection. [Be specific. If this collection is a form or a questionnaire, every question needs to be justified.]***

Researchers in the USGS will use the information collected from this study to determine the correlations between arsenic and uranium concentrations, and bedrock units in Massachusetts wells. This information will help guide future water-supply development and well-water testing. It will tell local health officials where the areas of concern are in their communities, and provide background concentrations by rock type for use in identifying contamination from human sources.

The questions are grouped into three parts.

PART 1 - Water sources and supplies

PART 2 - Well water sampling and instructions

PART 3 - Location and time of water sample

Plus a final statement that solicits the respondents' willingness to participate in a potential follow-up study.

- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology; (e.g., permitting electronic submission of response), and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden [and specifically how this collection meets GPEA requirements].***

This information collection does not intend to use automatic or any other electronic collection methods. A paper copy of the collection instrument and the water sampling containers will be mailed from and returned to the project leader.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.***

Due to the unique nature of this program and authorizing legislation no other Federal agency collects this information. No duplication will occur.

- 5. If the collection of information impacts small businesses or other small entities, describe the methods used to minimize burden.***

We have made efforts to keep the amount of information requested to a minimum for all of our respondents. This request for information is limited to individual households using a well system and it does not affect small businesses or other small entities.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

Failure to collect this information would mean that the occurrence and distribution of arsenic and uranium in bedrock wells would remain unknown in east-central Massachusetts. This would decrease the ability to select contaminant-free water supplies in the future. Mapping water quality in bedrock aquifers is within the mission of the Water Resources Division of the USGS.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

(a) requiring respondents to report information to the agency more often than quarterly.

Not applicable in this collection.

(b) requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it.

Not applicable in this collection.

(c) requiring respondents to submit more than an original and two copies of any document.

Not applicable in this collection.

(d) requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than 3 years.

Not applicable in this collection.

(e) in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study.

None.

(f) requiring the use of statistical data classification that has been reviewed and approved by OMB.

Not applicable in this collection.

(g) that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use.

This collection does not include a pledge of confidentiality.

(h) requiring respondents to submit proprietary trade secrets or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

This collection does not require proprietary, trade secret, or other confidential information not protected by agency procedures.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice [and in response to the PRA statement associated with the collection over the past three years] and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. [Please list the names, titles, addresses, and phone numbers of persons contacted.]

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years — even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

As required in 5 CFR 1320.8(d), the USGS published a 60-day notice in the Federal Register on August 27, 2008 (73 FR 50641). We solicited public comments for 60 days, ending on October 27, 2008. We did not receive any comments in response to this notice.

In the August 27, 2008 FR Notice we estimated that the time to take the survey and collect the water sample would be 30 minutes. We solicited comments from other researchers and survey developers about clarity of instruction, the number and types of questions asked and the length and intended use of the questionnaire. The respondents said that the instructions were clearly written, however, the survey design should be modified to decrease the amount of time to read and complete the survey. The peer-reviewers estimated the revised burden for this collection to be approximately 5 minutes to take the survey and 5 minutes to locate and collect the water needed for the sample. The total estimate is now 10 minutes versus the original 30. The people we contacted are listed in Table 1 below.

Table 1. Individuals Contacted Outside the Agency

Individuals	Contact information
Joseph Cerutti	Massachusetts Department of Environmental Protection 617 292-5859 Joseph.Cerutti@state.ma.us
Michael Celona	Massachusetts Department of Public Health 617 624 5757 Mike.Celona@state.ma.us
Julie Cosio	Massachusetts Department of Public Health 617 624 5757 Julie.Cosio@state.ma.us

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

No payments or gifts are given to respondents. However, the results of the testing will be provided to the

respondents at the end of the study.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

We protect proprietary information according to the Freedom of Information Act (5 U.S.C. 552) and implementing regulations (43 CFR 2); however, no assurance of confidentiality is given to participants.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The collection does not include sensitive or private questions.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- * **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- * **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- * **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

Our estimates are based on the outreach described in item 8. We expect to receive approximately 800 responses, taking each respondent approximately 10 minutes to complete the survey and sample collection, totaling 133 burden hours. We anticipate that it will take approximately 5 minutes to take the survey and 5 minutes to locate and collect the water needed for the sample. Therefore, the total annual burden for this collection will be 133 hours.

We estimate the dollar value of the annual burden hours to be \$3592.00 (see Table 2) based on the National Compensation Survey: Occupational Wages in the United States June 2007 published by the Bureau of Labor Standards Occupation and Wages, June 2007 (<http://www.bls.gov/oes/current/oes193092.htm>) and benefits multipliers from the BLS news release December 11, 2007 - USDL 07-1883. The particular values utilized are:

- Individuals. Average hourly wage is \$19.29 multiplied by 1.4 to account for benefits (\$27.01).

Table 2. Estimated Dollar Value of Annual Burden Hours

Description of Respondents	Number of annual Responses	Estimated Completion Time per Response (minutes)	Total Annual Burden Hours	Hourly Pay Rate (\$/hr est.)	Hourly Rate Including Benefits (1.4 x hourly pay rate)	Total Dollar Value of Annual Burden Hours*
Individuals/ Households	800	10	133	\$19.29	\$27.01	\$3592.00

* **Note:** Total dollar value of burden hours are rounded to agree with figures generated in ROCIS.

13. Provide an estimate of the total annual [non-hour] cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

There is no non-hour cost burden for respondents under this collection.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

The total cost to the government of this project is \$14,654. This cost includes data collection, analysis, and reporting. This includes hourly wages and benefits. Table 4 below shows Federal staff and grade levels performing various tasks associated with this information collection. We used the Office of Personnel Management Salary Table 2008-DCB (<http://www.opm.gov/oca/08tables/html/dcb.asp>) to determine the hourly rate. We multiplied the hourly rate by 1.5 to account for benefits (as implied by the BLS news release December 11, 2007 - USDL 07-1883).

Table 4. Annual Cost to the Federal Government

Federal Staff	Grade	Hourly Pay Rate	Hourly Rate incl. benefits (1.5 x hourly pay rate)	Estimated time spent by Federal Employees (hours)	Cost per federal staff (Hourly Pay Rate incl. Benefits x Number of Hours)
Hydrologist	13/5	\$45.05	\$67.58	80	\$5406
Physical Science Technician	4/5	\$15.41	\$23.12	400	\$9248
TOTAL					\$14654

15. Explain the reasons for any program changes or adjustments.

This is a new collection

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of

information, completion of report, publication dates, and other actions.

The results will be published as a USGS open-file report. The results will be used by the USGS Water Resources Division and the Massachusetts Department of Health for future water management planning. We will send an executive summary of the open-file report to the survey respondent. Finally the full report will be available on the USGS Water Resources website.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

Not applicable. We will display the expiration date on the form.

18. Explain each exception to the certification statement "Certification for Paperwork Reduction Act Submissions".

There are no exceptions to the certification statement.