

Maine Department of Health and Human Services  
Maine Center for Disease Control and Prevention

**Improving Public Health Infrastructure around Private Well Water  
Grant Number: 1U53EH001108-01**

**Evaluation Plan  
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## Table of Contents

Introduction .....	1
Overview of Well Water Safety Strategy .....	3
Logic Model: Well Water Safety .....	4

### Evaluation Plan

Objective 1: Establish and maintain state and community infrastructure and best practices to improve well water testing in Maine.....	5
Objective 2: Improve well water testing in Maine. ....	9
Objective 3: Develop and maintain partnerships.....	14

### Appendices

Appendix A: Private Well Water Measures Planned for Publication on the Maine Tracking Network .....	17
Appendix B: State Added Behavioral Risk Factor Surveillance System (BRFSS) Questions on Well Water .....	18
Appendix C: Community Partner Required Data Reporting.....	19

## Introduction

In September 2013, the Maine Center for Disease Control and Prevention's Environmental and Occupational Health Programs (EOHP) began several new initiatives to address well water safety in Maine. The work is funded by the U.S. Centers for Disease Control and Prevention and builds on EOHP's ongoing work to monitor private well water safety through data collection and analysis, and expands its efforts to encourage well owners to regularly test their drinking water.

This evaluation plan presents outcomes and measures, as well as data sources and analysis plans for EOHP's well water safety work that will occur between September 2013 and August 2015, and may be extended to include additional years, pending resources.

The plan is organized into sections corresponding to the following objectives.

### Objectives

1. Establish and maintain state and community infrastructure and best practices to improve well water testing in Maine
2. Increase private well water testing rates
3. Develop and maintain partnerships with relevant local, state, tribal and federal governments, nongovernmental organizations, and private for profit and non-profit groups

To meet these objectives, EOHP has crafted a targeted, community-based, prevention strategy. Under this strategy, EOHP will partner with three community-based public health organizations (referred to as community partners throughout this document) to promote well water safety and testing among community residents.

The evaluation of this strategy will be the responsibility of EOHP program staff, but will require the cooperation of the community partners and the Maine Health and Environmental Testing Laboratory, and staff from EOHP's Environmental Public Health Tracking Program and Toxicology Section. These entities will be asked to submit data regularly according to this evaluation plan. To this end, each section includes a detailed narrative description of evaluation activities and summary tables for reference. As activities evolve and processes are adjusted to overcome unforeseen challenges, EOHP may adjust this plan to align with these changes.

The ongoing evaluation of well water safety activities will allow EOHP and partners to adjust activities, and will result in the beginnings of best practices for community well water safety in Maine.

## **Collaborative Activities and Evaluation Processes**

As is noted throughout this plan, there are several activities related to EOHP's overall private well water safety initiative and its evaluation that are only possible through collaboration with programs, personnel, and mechanisms with funding sources separate from the cooperative agreement that funds the majority of EOHP's community-based private well water safety efforts (1U53EH001108-01).

Through these collaborations, EOHP is able to provide more resources to directly support the outreach and testing efforts of community partners and conduct a more thorough evaluation. The following is a list of those activities and processes.

1. **Making Private Well Water Data Publicly Available.** This is a major component of Maine's Environmental Public Health Tracking Program (EPHT) workplan and as such is funded through the EPHT cooperative agreement. This activity is included in EOHP's private well water work- and evaluation plans because it is essential to the planning and evaluation of the community-based efforts funded under the cooperative agreement.
2. **Well Water Testing Demonstration Video.** EOHP is using a separate funding stream to produce the Well Water Testing Demonstration Video. The video is included in EOHP's private well water work- and evaluation plans because it has been deemed an essential component for state and local capacity building to increase testing.
3. **Behavioral Risk Factor Surveillance System Module on Well Water Use and Testing.** EOHP has been using resources provided under separate funding streams to place questions related to well water use and testing behavior on the state-added Behavioral Risk Factor Surveillance System (BRFSS). The questions have been on a three-year rotation and comprise a major component of EOHP's ongoing surveillance of well water issues in Maine. EOHP will continue to use other funding streams to pay for these questions and leverage these data for the purposes of evaluating changes in testing rates in the state and funded communities.
4. **EOHP Toxicology Section.** EOHP will collaborate with toxicologists to provide follow-up guidance to well owners who identify elevated contaminants through the testing initiatives supported under the well water safety initiative. Further, toxicologists will track number of calls and referrals and help with follow-up surveys as part of the evaluation effort.

## Overview of Well Water Safety Strategy

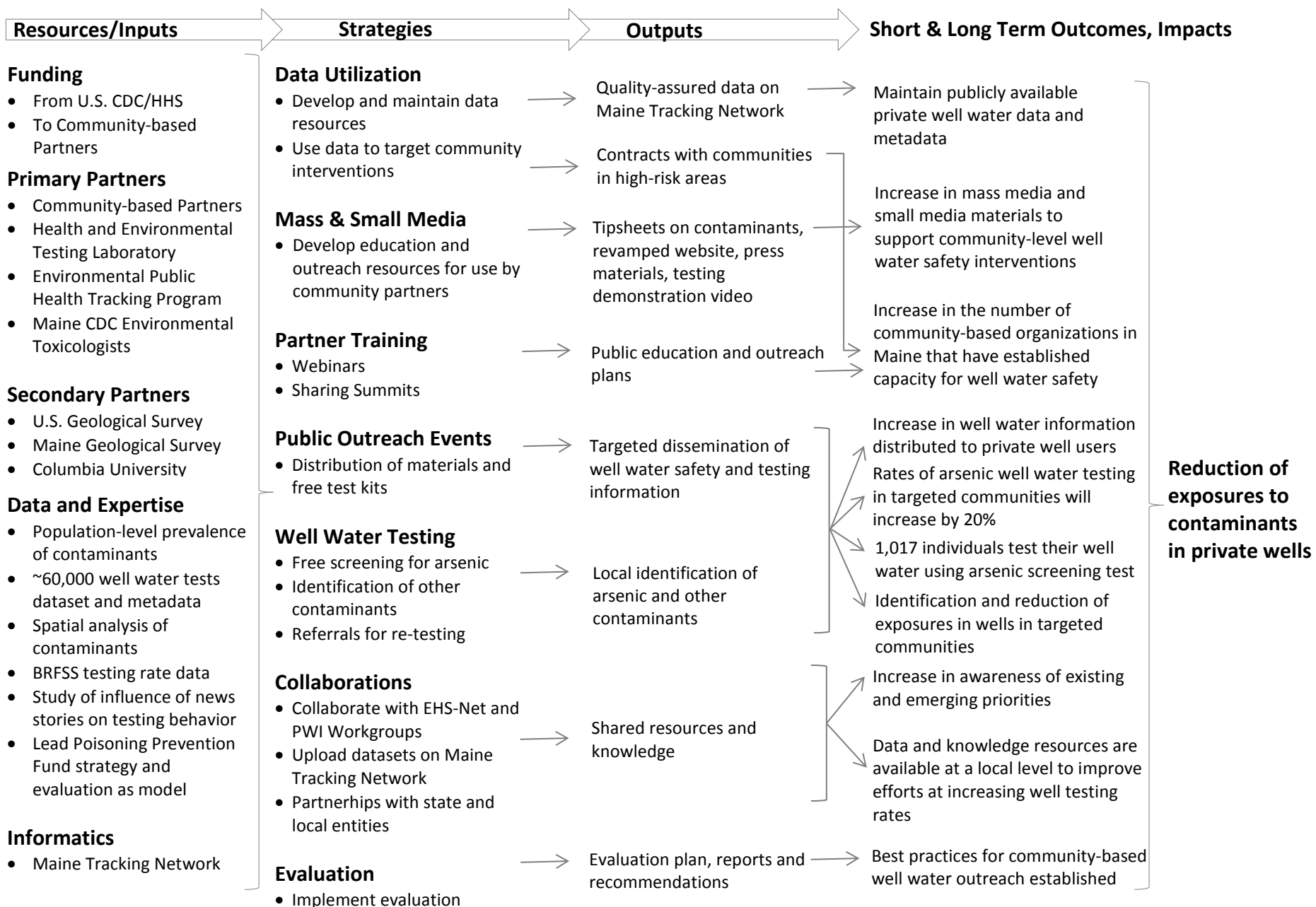
To meet the objectives identified in the previous section, EOHP has crafted a targeted, community-based, prevention strategy. Under this strategy, EOHP will partner with three community-based public health organizations to promote well water safety and testing among community residents.

EOHP and community partners will carry out specific activities that can be grouped into the following strategic components.

- **Data Utilization:** A collaborative arrangement with Maine’s Environmental Public Health Tracking program will make private well water data available on the Maine Tracking Network (Maine’s online data portal) in ways that allow community-based partners to target outreach and testing activities to well users in communities with high levels of contaminants or communities with low rates of testing.
- **Mass & Small Media:** Community partners will use mass media and small media to reach well users in their community with information about well water safety and testing. EOHP will provide partners with materials and partners will distribute materials.
- **Partner Training:** Community Partners will participate in webinars on private well water issues and attend semi-annual partner summits. Webinars and partner summits are designed to build knowledge and share resources and ideas among state and community partners.
- **Public Outreach Events:** Community Partners will host community education events for private well owners, which will promote well water testing and increase awareness of well water safety.
- **Well Water Testing:** Community Partners will offer free well water test kits in target communities as a means to encourage participation in community events promoting well water testing and to draw attention to outreach efforts. EOHP will provide technical guidance and support for well owners who participate in the testing program.
- **Collaborations:** The above mentioned well water safety activities will benefit from synergies created through collaborations between EOHP’s Environmental Public Health Tracking Network, EOHP’s Toxicology Section and agencies such as the Maine Geological Survey, the U.S. Geological Survey, Columbia University, the University of Maine Cooperative Extension, and the Northeast Private Well Symposium, among others.

The logic model included on the following page gives additional insight into EOHP’s well water safety strategy.

## Logic Model: Well Water Safety



## **Objective 1: Establish and maintain state and community infrastructure and best practices to improve well water testing in Maine.**

### **Overview**

In general, activities planned to meet this objective are designed to significantly increase the ability of EOHP and local communities to encourage well water testing. As such, the activities are focused on building the tools and systems needed to support direct education and outreach efforts.

For example, while not funded under EOHP's principal well water grant from the U.S. CDC, using the Maine Tracking Network's online environmental public health data portal to publish private well water data is considered essential to allowing EOHP and its local partners to effectively plan and evaluate efforts to increase testing. Therefore, EOHP has included this activity in the workplan and evaluation.

In addition, there are several activities around creating new, or revising existing, communication materials (e.g., tipsheets, website, and demonstration video) in order to meet the needs of local partner organizations that will be conducting local testing campaigns.

Finally, there are activities that are focused specifically on equipping local communities with the financial resources and knowledge to carry out community-based activities.

Following are the specific activities related to Objective 1.

### **Activities**

1. Ensure private well water data are publicly accessible
2. Develop and test easy to read tipsheet series for well water safety
3. Review and revise private well water informational website
4. Develop video demonstrating how to properly perform a home water test
5. Request for proposals for community-based well water testing initiatives will be issued and funding awarded to three community partners
6. Community partner outreach plans will be reviewed, modified if needed, and approved
7. Provide community partners with training via webinars and meetings

### **Evaluation**

The outcomes for the above activities will be evaluated as described in the narrative sections below. A table follows the narrative to summarize the evaluation plan for these outcomes. Unless otherwise noted, baselines measurements correspond to the beginning of the project period (September 1, 2013) and target measurements correspond to the end of the project period (August 31, 2015).

## Outcomes

### **1. *Maintain publicly available private well water data and metadata.***

EOHP will monitor the Maine Tracking Network's Environmental Public Health Tracking data portal to ensure that all data and measures along with associated metadata related to private well water are maintained and up to date (see Appendix A for a list of all measures under development for the Maine Tracking Network). Metadata will be made available to the EHS-NET. EOHP will additionally track the number of web-visits to this content area monthly.

### **2. *Increase in mass media and small media materials to support community-level well water safety interventions to include a series of 7-10 tipsheets, a re-vamped informational website, and press materials at time of contract awards to community partners.***

EOHP will track the number of materials created and tested during the project period using an internal materials inventory database.

### **3. *Increase in the number of community-based organizations in Maine that have resources and knowledge capacity to conduct well water safety promotion from 0 to 3 by project period end.***

In addition to tracking the publication of the Request for Proposals and funding awards, EOHP will review each Partner's education and outreach plan for completeness, appropriateness of its approach, and use of private well water data to inform approach. Partners will provide data about their participation in required EOHP trainings and events through required quarterly reports. EOHP will provide feedback on plans and participation to partners upon review of quarterly reports to ensure that Partners are meeting contract deliverables designed to build capacity. EOHP will also track process measures such as on-time receipt of quarterly reports to ensure evaluation and feedback occur in a timely manner.

### **4. *Best practices for community-based well water outreach established.***

An important outcome for the activities designed to build capacity is the identification of best practices for community-based well water outreach. Currently, the plan for measuring this outcome involves comparing Behavioral Risk Factor Surveillance System (BRFSS) arsenic testing data for towns that are funded by EOHP to the rest of the state and to towns where other known outreach about well water safety has been identified. (See Appendix B for list of BRFSS questions about well water.) These towns may include those that distribute the EOHP well testing brochure in town offices, those that conduct well testing days, or other activities. Upon contract award to the funded communities, EOHP will collaborate with the surveillance epidemiologist assigned to the Environmental Public Health Tracking Network to explore the feasibility of this type of analysis and the likelihood that the analysis would be useful. If the analysis is not useful, EOHP will explore additional methods of measuring this outcome.



Table 1: Evaluation Plan for Outcomes Associated with Objective 1

Outcome	Measure	Data Source	Analysis	Frequency	Responsible Entity	Baseline	Target
Maintain publicly available private well water data and metadata through collaboration with the Maine Environmental Public Health Tracking Program	Number and types of private well water measures available on Maine Tracking Network and metadata entries on EHS-Net	Maine Environmental Public Health Tracking Program	Review of Maine Tracking Network and EHS-Net	Annually	EOHP	0 on Maine Tracking Network; 0 on EHS-Net	33 on Maine Tracking Network; ?? on EHS-Net
	New years of data added to existing measures on Maine Tracking Network within 6 months of its availability	Maine Environmental Public Health Tracking Program	Review of Maine Tracking Network	Annually	EOHP	No years	'01-'12 water quality data; '03, '09, '12, '14, '15 BRFSS data
Increase in mass media and small media materials to support community-level well water safety interventions to include a series of 7-10 tipsheets, a re-vamped informational website, testing demonstration video, and press materials at time of partner contract award	Number of materials (brochures, tipshets video, press materials)	Inventory Tracking System (materials database)	Increases over existing materials	At time of partner contract award; Annually thereafter	EOHP	4 at project period start	13 at partner contract award
	Completed website revisions	Internal	Review of revisions	Measured once (March 2014)	EOHP	N/A	N/A
Increase in the number of community-based organizations in Maine that have resources and knowledge capacity to conduct well water safety promotion from 0 to 3 by project period end.	Number of community contracts	Contract Management System	Inventory of contracts	Annually	EOHP	0	3
	Completed outreach plans	Community Partners	Review of planned activities	Annually	Community Partners	0	3
	Number of trainings and sharing summits attended by partners	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	Community Partners	0	6 webinars & 3 sharing summits each
	On-time completion of quarterly reports	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	EOHP	0	100% on time

Outcome	Measure	Data Source	Analysis	Frequency	Responsible Entity	Baseline	Target
Best practices for community-based well water outreach established	Number of households reporting having ever tested well for arsenic in funded communities and in other communities with known outreach	BRFSS (EPHT surveillance epidemiologist analysis)	Comparisons of communities	Annually as data become available	EOHP	TBD	TBD

## Objective 2: Improve well water testing in Maine.

### Overview

Efforts to improve well water testing in Maine will be focused primarily in the communities served by the three partner organizations that will receive the well water safety contracts. While the contracted work is not expected to commence until the spring of 2014, each funded partner will be expected to hold a minimum of nine community education events for well owners in high-risk areas, distribute targeted marketing materials and training information about well water testing and safety, use earned and/or paid media to promote free well water testing and awareness, and facilitate the completion of 339 well water tests. These activities will take place over the entire contract period (estimated to be 15-18 months). As described in the evaluation section below, partners will track these activities on the reporting forms submitted quarterly to EOHP.

In addition to these community-level activities, EOHP will respond to those households where the arsenic-only screening test showed other elevated contaminants of concern (e.g., uranium, fluoride, manganese). Staff members of EOHP's Toxicology Section will contact well owners by phone to discuss risks and recommend re-testing to confirm results.

Following are the specific activities related to Objective 2.

### Activities

1. Community partner outreach events.
2. Media distribution.
3. Distribution and promotion of free arsenic only well water "screening" kits.
4. Respond to well water test kits with elevated contaminants of concern.

### Evaluation

The outcomes and measures below represent the extent of planning that can be done at present; upon awarding contracts to the three partners, the evaluation plan can be finalized. Specifically, baselines, targets, and analysis plans for materials distribution and arsenic testing in targeted communities may need be adjusted once EOHP knows the communities where interventions will occur. These adjustments will be driven by current work to promote well water safety in the community and the reliability of the estimates of arsenic testing in those communities. Pending contract award, EOHP will finalize outcomes and analysis plans for this portion of the evaluation plan.

Pending any revisions, the outcomes for the above activities will be evaluated as described in the narrative sections below. A table follows the narrative to summarize the evaluation plan for these outcomes. Unless otherwise noted, baselines measurements correspond to the beginning of the project period (September 1, 2013) and target measurements correspond to the end of the project period (August 31, 2015).

## Outcomes

### **1. Increase in well water information distributed to private well users in targeted communities from 0 to 6,000 pieces by project period end.**

Partners will track the amount of mass media placements (newspaper articles, advertisements, etc.) and small media materials (brochures, tipsheets, posters, etc.) distributed to target populations. Partners will also track the estimated number of contacts with the target population they have through events. Partners will provide media and event data to the EOHP through required quarterly reports. EOHP will establish a baseline for materials distribution with each Partner upon award. EOHP will track regional and state mass media placements during the project period, using media monitoring tools such as Google News and LexisNexis. EOHP will use the quarterly data to work with partners to identify successful activities, address barriers, and make appropriate programmatic adjustments incrementally throughout the project period. Process measures will include the evaluation of amount of resources available to produce materials compared to the need for those materials.

### **2. Increase in the number of well water screening tests for arsenic in targeted communities from 0 to 1,017 by project period end.**

EOHP will track the number and location of screening tests analyzed of those distributed by community partners. ME-HETL will assign these kits a separate billing code, allowing EOHP to track completed tests exclusively related to this funding source on a quarterly basis. EOHP will use the quarterly ME-HETL data to monitor testing in each community and provide counts to each partner, allowing partners to evaluate and adjust their activities to meet benchmarks and ensure testing is occurring in high-risk areas. EOHP will also track process measures such as the number of samples rejected by the laboratory, backlog of samples waiting to be analyzed, ability of laboratory to provide test kits as needed, and others that will help identify barriers to completing testing.

### **3. Rates of arsenic well water testing in targeted communities will increase by 20% by 2015.<sup>1</sup>**

EOHP will use the state BRFSS to track and compare statewide and town-level testing prevalence. EOHP has run well water testing questions on the 2003, 2009, and 2012 BRFSS. Results from the 2012 survey will be used as a baseline for testing prevalence, using town-level data aggregated to the smallest possible geographic unit that includes the funded Partners' target areas. EOHP will use data from the 2014 survey (available in the fall of 2015) to measure intermediate results and 2015 survey data (available fall 2016) to measure final results. EOHP will compare aggregated town-level results to statewide results to determine if the proposed activities have achieved local increases in testing prevalence.

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<sup>1</sup> EOHP will adjust this outcome and its measures upon contract award when EOHP can determine best possible estimates of current and future testing rates given reliability of BRFSS data.

**4. *Identification and reduction of exposures to unsafe levels of arsenic or other naturally occurring contaminants in 150 private wells in targeted communities by project period end.***

EOHP will track arsenic levels for all free screening tests completed through the proposed activities, as well as the number of wells with results that exceed 10 ppb. In addition, EOHP will track the number of screening tests that indicate possible (i.e., unconfirmed and not certified) elevated levels of other inorganic contaminants such as uranium, lead, manganese, and antimony, as well as the number of referrals for confirmatory re-testing, through monthly reports obtained from the Environmental Toxicology Section. Finally, the Environmental Toxicology Section will conduct a follow-up survey of all well users with elevated levels of contaminants to determine actions taken to reduce exposures.

Table 2: Evaluation Plan for Outcomes Associated with Objective 2

Outcome	Measure	Data Source	Analysis	Frequency	Responsible Entity	Baseline	Target
Increase in well water information distributed to private well users in targeted communities from 0 to 6,000 pieces by project period end.	Number of materials distributed	Community Partner Quarterly Reports	Ongoing recording and tracking	Quarterly	Community Partners	TBD pending contract	2,000 pcs by each partner
	Budget for print materials and number of materials distributed and number of additional materials needed	Budget documents, Community Partner Quarterly Reports, and feedback	Comparison of needs to resources available	Semi-annually	EOHP	N/A	\$300 for printing
Increase in the number of well water screening tests for arsenic in targeted communities from 0 to 1,017 by project period end.	Number of screening tests completed in each funded community	ME-HETL	Comparison against requirement	Quarterly	EOHP	0	339 in each community
	Number of contacts with private well owners	Community Partner Quarterly Reports	Ongoing recording and tracking	Quarterly	Community Partners	0	500 by each partner
	Number of outreach events completed	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	Community Partners	0	9 events by each partner
	Number of mass media placements	Community Partner Quarterly Reports	Ongoing recording and tracking	Quarterly	Community Partners	0	3 by each partner
	Number of screening tests rejected by lab	ME-HETL	Reasons for rejection	Every two weeks	EOHP	0	0
	Time between sample receipt, analysis and results	ME-HETL	Reasons for delays	Every two weeks	EOHP	TBD	TBD
	Time between kit orders and order fulfillment	ME-HETL	Reasons for delays	Every two weeks	EOHP	0	1 week

Outcome	Measure	Data Source	Analysis	Frequency	Responsible Entity	Baseline	Target
Rates of arsenic well water testing in targeted communities will increase by 20% by 2015.	Number of households reporting having ever tested well for arsenic in funded communities	BRFSS (EPHT surveillance epidemiologist analysis)	Comparison against 2012 baseline and rest of state	Annually as data become available	EOHP	TBD	TBD
	Number of contacts with private well owners	Community Partner Quarterly Reports	Ongoing recording and tracking	Quarterly	Community Partners	0	500 by each partner
	Number of outreach events completed	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	Community Partners	0	9 events by each partner
	Number of mass media placements	Community Partner Quarterly Reports	Ongoing recording and tracking	Quarterly	Community Partners	0	3 by each partner
Identification and reduction of exposures to unsafe levels of arsenic or other naturally occurring contaminants in 150 private wells in targeted communities by project period end.	Number and location of wells tested that exceed 10 ppb for arsenic	ME-HETL database	Number of elevated tests as % of all tests	Monthly	EOHP	0	35 in each community
	Number and location of wells with screening tests that identify other elevated contaminants	ME-HETL and Environmental Toxicology Section	Number of elevated tests as % of all tests	Monthly	EOHP	0	15 in each community
	Number of toxicology consults provided for elevated results	Environmental Toxicology Section Consults Tracking Sheets	Number of referrals as % of all elevated tests	Monthly	EOHP	0	150
	Number reporting taking action to reduce exposures	Environmental Toxicology Section Follow-up Survey	Number of actions taken	Annually	EOHP	0	150

## **Objective 3: Develop and maintain partnerships with relevant local, state, tribal and federal governments, nongovernmental organizations, and private for profit and non-profit groups**

### **Overview**

Work planned to reach Objective 3 will allow EOHP and its partners to better understand and address private well water issues in the state. Partnerships with national, state, and local entities will enhance the ability of EOHP and its partners to reach well owners through knowledge and resource sharing. In addition, a strong collaborative relationship between EOHP and the Maine Environmental Public Health Tracking Program will ensure that private well water data available on the Maine Tracking Network supports state and community-level intervention surveillance, planning, and evaluation.

Following are the specific activities related to Objective 3.

### **Activities**

1. Collaborate with EHS-Net and Private Well Initiative (PWI) workgroups to identify and address emerging private well water priorities and focus areas.
2. Convene Community Partners through Sharing Summits to share best practices and brainstorm ways to overcome challenges.
3. Maintain collaboration with Maine's Environmental Public Health Tracking Program to make private well water data available on the Maine Tracking Network.
4. Identify synergies and resources to share with secondary partners (USGS, MGS, Columbia University, etc.)

### **Evaluation**

There are several impact outcomes associated with these activities that are generally more qualitative in nature. For example, EOHP will use qualitative descriptions of the nature of its involvement with national, state and local partners to assess the value of participation in workgroups and results of partnerships. Some quantitative measures such as the number of meetings attended and number of partnerships maintained and developed will support the qualitative analysis of these outcomes.

The two outcomes for the above activities will be evaluated as described in the narrative sections below. A table follows the narrative to summarize the evaluation plan for these outcomes. Unless otherwise noted, baselines measurements correspond to the beginning of the project period (September 1, 2013) and target measurements correspond to the end of the project period (August 31, 2015).

### **Outcomes**

#### **1. *Increase in awareness of existing and emerging private well water priorities.***

Measuring this outcome will involve tracking of EOHP staff participation in EHS-Net and PWI workgroup meetings and assessing the value of this participation; descriptions of the participation and outcomes of the community partner training webinars and sharing summits, including qualitative feedback from community partners; and tracking the number and nature of



partnerships with state and local entities. EOHP staff will track partnerships using a spreadsheet to document the partner entities and the nature of the partnership.

**2. *Increase in data and knowledge resources available at local and state level to inform efforts to increase well testing rates.***

EOHP will monitor the Maine Tracking Network's Environmental Public Health Tracking data portal to ensure that all data and measures along with associated metadata related to private well water are maintained and up to date (see Appendix A for a list of all measures under development for the Maine Tracking Network). Partners will provide data about their participation in required EOHP trainings and events through required quarterly reports and partners will provide feedback about the value of these activities through evaluation forms. Finally, EOHP will track the number and nature of partnerships with state and local entities and any resulting public health actions. EOHP staff will track partnerships using a spreadsheet to document the partner entities and the nature of the partnership.

Table 3: Evaluation Plan for Outcomes Associated with Objective 3

Outcome	Measure	Data Source	Analysis	Frequency	Responsible Entity	Baseline	Target
Increase in resources and awareness of existing and emerging priorities.	Number of EHS-Net and PWI workgroup meetings attended.	Workgroup meeting minutes	Qualitative assessment of value	Annually	EOHP	0	12 meetings
	Number of trainings and sharing summits attended by partners	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	Community Partners	0	6 webinars & 3 sharing summits each
	Feedback from Community Partners about value of Sharing Summits	Sharing Summit Evaluation Forms	Qualitative assessment of value	Semi-annually	EOHP	N/A	N/A
	Number of partnerships between EOHP and other state and local entities	Partner Tracking Sheet	Count and assessment of partnerships	Annually	EOHP		
Increase in data and knowledge resources available at local level to inform efforts to increase well testing rates.	Number and types of private well water measures available on Maine Tracking Network and metadata entries on EHS-Net	Maine Environmental Public Health Tracking Program	Review of Maine Tracking Network and EHS-Net	Annually	EOHP	0 on Maine Tracking Network; 0 on EHS-Net	33 on Maine Tracking Network; ?? on EHS-Net
	New years of data added to existing measures on Maine Tracking Network within 6 months of its availability	Maine Environmental Public Health Tracking Program	Review of Maine Tracking Network	Annually	EOHP	No years	'01-'12 water quality data; '03, '09, '12, '14, '15 BRFSS data
	Number and content of trainings and sharing summits attended by partners	Community Partner Quarterly Reports	Comparison against requirement	Quarterly	Community Partners	0	6 webinars & 3 sharing summits each
	Feedback from Community Partners about value of Sharing Summits	Sharing Summit Evaluation Forms	Qualitative assessment of value	Semi-annually	EOHP	N/A	N/A
	Number of partnerships between EOHP and other state and local entities and resulting public health actions	Partner Tracking Sheet	Count and assessment of partnerships	Annually	EOHP		

## Appendix A: Private Well Water Measures Planned for Publication on the Maine Tracking Network

At present, the Maine Environmental Public Health Tracking Program intends to make 33 measures related to private well water available on its web base public health data portal (The Maine Tracking Network). These measures are organized into three broad topic areas as described below.

### Topic: Well Water Quality

#### Measures=30 (5 measures for each of 6 analytes)

The Maine Tracking Network is working with a dataset of well test results from the state Health and Environmental Testing Laboratory analyzed between 2001 and 2012. From this dataset, the Maine Tracking Network will make the following measures available for six analytes of interest.

#### Measures

1. Percent of wells tested that exceed the public health guideline (MCL or MEG)
2. Maximum
3. 95<sup>th</sup> percentile
4. Median
5. Number of wells in the dataset tested for an analyte

#### Analytes

1. Arsenic
2. Uranium
3. Fluoride
4. Manganese
5. Nitrates
6. Nitrites

### Topic: Homes that Use a Private Well for their Drinking Water Supply

#### Measures=1

The Maine Tracking Network uses survey data from the Behavioral Risk Factor Surveillance System (BRFSS) and the U.S. Census to track the number of homes that rely on private wells for drinking water. (See Appendix B for list of private well water questions included on the BRFSS.)

### Topic: Homes that have had the Well Tested

#### Measures=2

The Maine Tracking Network will publish BRFSS data estimating the number of homes with private wells that report having ever done a water test and the number of homes with private wells that report having ever done a test for arsenic. (See Appendix B for list of private well water questions included on the BRFSS.)

## Appendix B: State Added Behavioral Risk Factor Surveillance System (BRFSS) Questions on Well Water

The following questions will be asked on the 2014 and 2015 BRFSS state-added questionnaire as part of EOHP's ongoing surveillance of well water use and testing in Maine. All but question 4 were asked in 2012, 2009, and 2003. Question 4 has been added to determine a baseline of testing for radon in water.

When available, the 2012 results to questions 1-3 will become the baseline for several evaluation measures planned for EOHP's well water safety work. Results from the 2014 and 2015 surveys will be available in the falls of 2015 and 2016 respectively.

### Introduction for Survey

Now I would like to ask some questions about well water. When I ask about using well water, I am asking about the water you currently use for drinking, cooking or bathing.

### Questions

1. Do you get any of your water from a well?

1. Yes
2. No [Go to next section]
7. Don't know/Not sure [Go to next section]
9. Refused [Go to next section]

2. Have you ever had your current well water tested?

1. Yes
2. No (Go to next section)
7. Don't know/Not sure (Go to next question)
9. Refused (Go to next question)

3. Arsenic is not included in all water tests. Have you tested your well water for arsenic?

1. Yes
2. No
7. Don't know/Not sure
9. Refused

4. Radon is not included in all water tests. Testing water for radon is not the same as testing your household air for radon. Have you tested your well water for radon?

1. Yes
2. No
3. Don't know/Not sure
9. Refused

## Appendix C: Community Partner Required Data Reporting

The following table contains the data and the associated outcome that will be the responsibility of EOHP’s Well Water Community Partners. Unless otherwise noted, all data will be submitted to EOHP via quarterly narrative and materials use reports and all analyses will be conducted by EOHP staff.

<b>Data</b>	<b>Contract Requirement</b>	<b>Associated Outcomes</b>
Completed outreach plans	Submitted within 30 days of contract award (Not submitted via quarterly report)	Increase in the number of community-based organizations in Maine that have resources and knowledge capacity to conduct well water safety and promotion from 0 to 3 by project period end.
Number of trainings (webinars) and sharing summits attended by partners	6 webinars and 3 sharing summits each	Increase in the number of community-based organizations in Maine that have resources and knowledge capacity to conduct well water safety and promotion from 0 to 3 by project period end.  Increase in resources and awareness of existing and emerging priorities.
Number of materials distributed	No required quota, but target is 2,000 pieces each	Increase in well water information distributed to private well users in targeted communities from 0 to 6,000 pieces by project period end.
Number of contacts with private well owners	No required quota, but target is 500 contacts each	Increase in the number of well water screening tests for arsenic in targeted communities from 0 to 1,017 by project period end.
Number of outreach events completed	9 events each	
Number of mass media placements	No required quota, but target is 3 placements each	Rates of arsenic well water testing in targeted communities will increase by 20% by 2015.
Feedback about value of Sharing Summits		Increase in resources and awareness of existing and emerging priorities.  Increase in data and knowledge resources available at local level to inform efforts to increase well testing rates.
Number and content of trainings and sharing summits attended by partners	6 webinars and 3 sharing summits each	Increase in data and knowledge resources available at local level to inform efforts to increase well testing rates.