# **About this project**

Unlike well water, public water systems must meet standards set by the Environmental Protection Agency (EPA) that limit the levels of contaminants in drinking water, called Maximum Contaminant Levels (MCLs). The federal MCL for arsenic in public drinking water is 10 ug/L. In 2019, the state of New Hampshire lowered their MCL to 5 ug/L. Maine and New Hampshire have among the highest per-capita reliance on private wells for drinking water in the United States, yet approximately 10% of Maine wells and 20% of New Hampshire wells have levels of arsenic above 10 ug/L. And approximately one in four North Carolina residents rely on private wells, however, the state is 4th highest in the nation for wells exceeding the federal arsenic MCL. Despite these statistics, the testing rate in all study areas in these states remains low.

This project, “Data to Action: A Secondary School-Based Citizen Science Project to Address Arsenic Contamination of Well Water” engages students as citizen scientists in collecting well water for arsenic analysis. The goal is the help students better understand the issue of well water contamination and share their understanding with their communities to help protect public health.

# **Sampler Information**

**Sample number (YYYY-###): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Sample date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sample time: \_\_\_\_\_\_\_\_\_\_\_\_AM / PM**

**School Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­\_

**Parent/Guardian Name\*:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*If you are a community member who is contributing a sample to a local school project, put your name here.

**Student Name (if applicable):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Email of guardian or person who will receive test results (not student):**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Street Address:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**City:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **State:** \_\_\_\_\_\_\_\_\_ **ZIP:**\_\_\_\_\_\_\_\_\_\_

**Mailing Address** (if different)**:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Drinking Water Information**

**Drinking Water Source (circle one):**

Dug well (~10-30 ft deep) Driven well (~30-50 ft deep) Drilled well(~ 50+ ft deep) Other

I have a well, but I don’t know what kind. I don’t know Public drinking water supply

**Have you ever tested your water for arsenic before**?

Yes No I don’t know

# **Permissions**

Circle yes or no if you agree to the following permissions. Note that you will receive your well water results regardless of your answer.

# Researchers from College of the Atlantic and other partner organizations are interested in the data collected as part of this project. They would like to use your well water data to create scientific maps showing the relationship between arsenic levels and soils or bedrock or other data. These maps will be used for community and scientific discussions and potentially publication in scientific journals. These maps will not display your name or home address, nor will they show any identifying features, like streets, that may expose your identity or location. May we share your data with them? **Yes/No**

# The Maine Center for Disease Control and Prevention (CDC) and the New Hampshire Department of Environmental Services (DES) are interested in the data collected as part of this project so that they can better serve the public health needs of each state. They will keep your data confidential. May we share your data with them? **Yes/No**

# **Water Sample Information**

**Sample Location:** Kitchen Bathroom Outside Other

**Was the sample filtered?** Yes No I don’t know

**Type of filtration system:**

Whole-house filter Water pitcher or refrigerator Sink-mounted filter

No filter Other I don’t know

**If you currently filter your water, please explain how and why** (i.e. under sink or whole-house filter):

# **Results**

Your project leader will let you know when your test results are available, usually 6-8 weeks after samples are turned in. Well water results will be available online. You can go to allaboutarsenic.org and type your sample number in the search bar to find your data. As a reminder, your sample number is located on the magnet you received on sampling day.

# **Disclaimer**

I understand Dartmouth’s Trace Element Analysis (TEA) laboratory tests water samples specifically related to this project and produces reliable data for research purposes. Although TEA is not certified by the National Environmental Laboratory Accreditation Program, it does participate in the USGS proficiency program for water quality measurements which conducts an inter-laboratory comparison study semiannually. If I have any concerns about my results, I understand that I can always re-test my well water using a certified private or state water quality laboratory.

Parent/Guardian Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (required for well water sample analysis)