

# Use of Volunteer-Collected Data

## Utah Water Watch

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# Utah Water Watch

## Utah's public science water quality monitoring program

- Partnership between Utah State University Extension and the Utah Division of Water Quality
- Started in 2012
- Trained 600+ volunteers, monitored 250+ sites

# Mission

UWW's mission is to encourage, educate, and engage volunteers in monitoring water quality by providing the knowledge, training, and resources needed to examine the health of Utah's lakes and streams.

- Educate Utah citizens on the natural changes and functions of our state's water bodies
- Encourage Utah citizens to become advocates for their local water bodies
- Engage Utah citizens with others across the state also interested in protecting their waterbodies





# There are 3 steps to become a volunteer

1. Fill out the volunteer registration form.
2. Attend a workshop and become certified.
3. Choose a site to monitor.

# For Educators

# Utah Water Watch & Stream Side Science



## Bringing Kids and Teachers to Water



Lessons by Grade



Lessons by Topic



Educator Workshops



Citizen Science Connection

This program uses stream monitoring techniques to teach about water pollution and watershed function. We provide workshops and lesson plans to facilitate teachers and enhance learning.

### STREAM SIDE SCIENCE

- [About](#)
- [Lessons by Topic](#)
- [Lessons by Grade](#)
- [Lessons by Core Alignment](#)
- [Use SSS in Your Watershed](#)
- [Photos and Videos](#)
- [Program Assessment and Impacts](#)
- [Teacher Workshops and Materials](#)

### FIND MORE

- [Additional Lessons](#)
- [Educator Resources](#)
- [Utah Water Watch](#)
- [Water Quality Extension](#)
- [Contact Us](#)

[Calendar](#)

"It was great! I am excited to use this information with my own classroom in the future."

"Keep doing this workshop! This is by far the most useful workshop I've

# FAQ

## What do volunteers get?

- We provide the training and equipment
- Gain an in depth understanding of why water quality is important
- Hands on experience recording water quality data
- Help protect local lakes and streams
- Help state agencies manage water bodies by sharing data

## Who can volunteer?

- UWW is a free program and is open to volunteers of all ages and backgrounds.

## How much time does it take?

- UWW is a flexible program that requires small monthly time commitment
  - Generally April – October
  - 30 minutes per site visit



# Volunteer Levels

## Tier I

- Collect baseline data used for education and screening
- Simple, easy to do methods
- Monthly monitoring, April - October
- Anyone can join

## Tier II

- Collect high quality data for assessment purposes
- State-approved methods
- Monitoring frequency depends on specific project goals
- Volunteers who consistently monitor their sites or those with a background in environmental monitoring can join



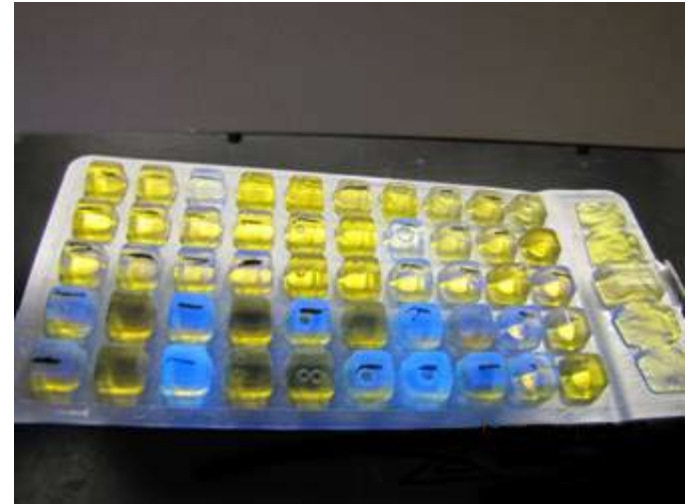
# Waterborne Pathogens

## Focus on

- *E. coli*
- Harmful Algal Blooms



# *E. coli* Monitoring



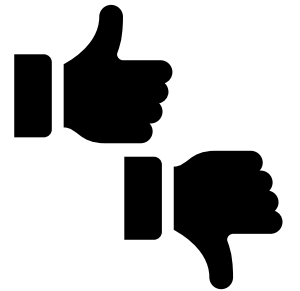
# Utah HAB Squad

- Volunteer HAB monitoring program
- Weekly or every other week monitoring at priority sites
- Do not need to be a Utah Water Watch volunteer to join
- Currently piloting



# How it Works

- We provide simple instructions to learn how to identify HABs in the field.
- Make frequent (weekly or every other week) observations at your site.
- When you visit your site, record the presence or absence of a possible HAB using the Harmful Algal Bloom (HAB) / Cyanobacteria Datasheet.
- Upload your data to CitSci.



# Identification

## Filamentous Green Algae

### Stick Test

If you can lift up the algae with a stick, it's filamentous green algae



## HABs (Cyanobacteria)

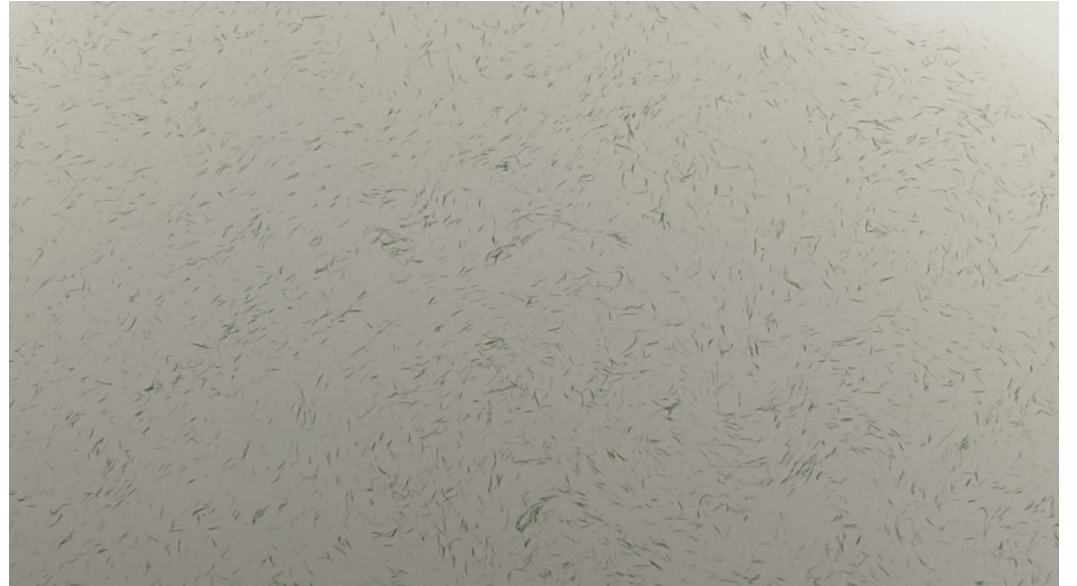


# If You Suspect a HAB

1. Call the 24-hour Environmental Incidents Line at (801) 536-4123.
2. Contact UWW by phone or email to alert us of a potential HAB. We will collaborate with the Utah Division of Water Quality.
3. Upload data into the Harmful Algal Bloom (HAB) / Cyanobacteria Datasheet in CitSci as soon as possible.
4. If you can, return to the waterbody site daily to take photos and upload them to CitSci.
5. Check the UDWQ HAB website for updates on the most current conditions.

*Not finding a HAB is also important data to record!*

# Case Study – Jordan River





- Harmful Algal Blooms (HABs)
- 🔔 2020 Monitoring Updates -
- Jordan River**
- Kents Lake
- Mantua Reservoir
- North Fork of the Virgin River
- Otter Creek Reservoir
- Piute Reservoir
- Strawberry River
- Utah Lake
- Yuba Lake
- 📷 HABs Photo Gallery +
- 👨👩👧👦 Protect Yourself, Family, Pets +
- Learn About HABs
- For Response Agencies +
- Past Bloom Events +
- 📄 Contact Info
- Health Advisory Panel

Water Quality

**COVID-19:** In an effort to reduce the spread of COVID-19, The Utah Department of Environmental Quality is limiting person-to-person contact and will close our offices to the public starting on April 3. Please [contact DEQ here](#) to conduct business.

## Jordan River Algal Bloom Monitoring 2020

### Update July 19, 2020

The Jordan River in Lehi is under a Health Watch after a Utah State University Water Watch volunteer observed a harmful algal bloom there on July 18, 2020. The Utah County Health Department, Salt Lake County Health Department, and Salt Lake City Public Works have been notified. The Division of Water Quality (DWQ) plans to sample the area within the next seven days.

A Health Watch is not a formal advisory level but rather an indicator that a bloom may exist or become more severe based on available information from DWQ and the Department of Health. Indicators can include visual reports.

**Due to state budget cuts, the harmful algal bloom program is being funded by EPA through a one-time grant. This limits DWQ's monitoring to 18 priority waterbodies in Utah.**

### Report a Bloom

24-Hour DEQ Environment Incidents Line:  
(801) 536-4123

### Call Utah Poison Control Center

If you believe you or your pet have been exposed to a harmful algal bloom, call **(800) 222-1222**.



Last updated: July 20, 2020 at 1:10 pm

Categories: [Harmful Algal Blooms \(HABs\)](#) [Health Advisory Panel](#) [Water Quality](#)

Tags: [Jordan River](#)

# By the Numbers

## 2021

- New volunteers: 41
- Total participants: 1,086
- Sites monitored: 98
- Monitoring events: 496

Utah Water Watch volunteers expanded the reach and capabilities of monitoring efforts statewide. Volunteer driving and monitoring time in 2021 is valued at **>\$27,124.**







# Lessons Learned

- Partnerships are everything
- Follow the need
- Work within limitations and stretch yourself and your team

# Looking Forward

- Increase support
  - Funding
  - Staffing
  - Tier III volunteers
- Expand Utah HAB Squad
- Increase Tier II projects
- Equipment
- Additional parameters
  - Aquatic macroinvertebrates
  - Salinity/Conductivity



# Thank you!

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USU Extension - Water Quality



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# Gotta Go!

## When Nature Calls in the Great Outdoors



[HOME](#) [FORESTS](#) [DESERT & ALPINE](#) [RV CAMPING](#) [RULES & REGS](#) [SPECIFIC SITUATIONS](#)



### Know How to 'Go!'

With recreation increasing on Utah's public lands every year, improper disposal of human waste can lead to:

- Water pollution
- Spread of disease
- Other people or wildlife finding your left-behind waste and toilet paper
- Decreased rate of waste decomposition

[GottaGoUtah.org](http://GottaGoUtah.org)