

CrowdHydrology

CrowdHydrology collects water data using social media and citizen science. When a citizen scientist sends in observations of the water levels in a stream or lake, we use those measurements to create a historical record. Currently we have a text message-based observation system where users manually enter in the water level and a second smartphone-based system that uses image processing to collect water levels. If enough people send in data, we can help improve hydrologic predictions such as floods and droughts.

State and local agencies can't put scientific monitoring equipment in every water body, but CrowdHydrology provides a way for local communities to track any lake or stream that's important to them. Help support CrowdHydrology by sending in a measurement or install a CrowdHydrology gage in a lake or stream. Installing a gage is easy to do and can make a big difference in your community. Visit www.crowdhydrology.com and <https://water.cs.mtu.edu/water/> to see some current measurements.

How Our Text-Based System Works

- 

1 Find the ruler.
- 

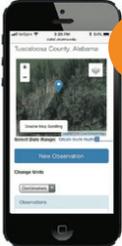
2 What's the height measurement at water surface?
- 

3 Send to: 716 218 0282
Text "WV1000" and the height from step 2.

How Our Mobile Phone System Works

- 

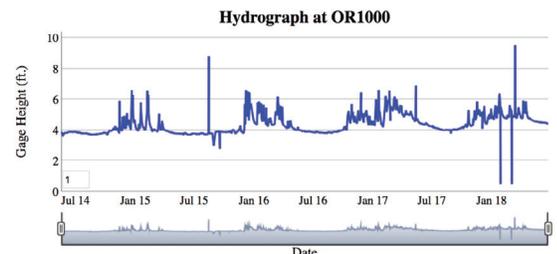
1 Find the pole.
- 

2 Scan the QR code to open the Mobile Hydrology App
- 

3 Take a picture of the pole and submit your observation.

What is an Example of CrowdHydrology Data?

These data (n=1,200) are collected on Oak Creek near the Oregon State University campus. Citizen science data is not perfect and there are going to be outliers. However, these data can be useful in ungagged watershed where traditional observations may be cost prohibitive.



Goals: Our goal is to have every CUAHSI member to have a CrowdHydrology gage near their Institution. We would love to have you join and help improve our network. If you would like further information please contact us: Chris Lowry clowry@buffalo.edu or Ben Ruddell benjamin.ruddell@nau.edu

Partner Originations



Funding

