

How's My Waterway : Telling the Water Story

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What can you tell me about my water?

Is it safe to drink?

Is there enough water?

Can I swim in it?

Is it polluted?

If it is polluted, what are you doing about it?

If it isn't polluted, what are you doing to protect it?

What can I do to help?



Pulling the Pieces Together: Telling the Water Story

Provide the public with usable, meaningful information

Communicate progress states, tribes, and EPA are making towards restoring or protecting water quality

Engage the public in understanding impacts on water and issues related to water



What Makes How's My Waterway Work?



Value of Sharing Data / Getting Started

- Shared data preserves the value of the investment made in data collection
 - Allows for reuse by other parties
 - Preserves that data for future use
- Common data formats allows for shared analysis tools
- Allows for more transparency to the public
- To get started:
 - Evaluate the types of data that you have and how they are stored
 - Make sure you have the documentation for how the data were collected and analyzed
 - It's best to consider all of this prior to collecting data
 - Visit <u>https://www.epa.gov/waterdata/water-quality-data-wqx</u> for more information on how to publish monitoring data



Water Sampling – Water Quality Exchange (WQX)

- WQX is a 'standards' based approach for <u>sharing</u> water quality monitoring data
- WQX defines a common data model for communicating water quality data (sample data)
- Designed to be automated
- The structure of partner data systems don't matter, so long as they can map to WQX
- WQX also provides a standard format for publishing data

NHDPlus



NHD + WBD + elevation

...*plus* lots of additional information Value Added Attributes (VAAs)

NHDPlus Continued

- 1:100,000 resolution product
- 2.7 million catchments
- Developed by EPA and USGS, maintained by EPA*
- widely used for modeling
- connects landsurface activities to downstream effects
- upstream/downstream navigation
- flow volume and velocity, time of travel



https://www.usgs.gov/media/images/nhd-plus-hr-status-graphic-2021-2-10

NHDPlus High Resolution

- 1: 24,000 or better
- 27 million catchments
- Currently in beta

Disconnected from original NHDPlus

Where do you find NHD, NHDPlus and WBD?

Answer: the USGS National Map

(https://www.usgs.gov/core-science-systems/nationalgeospatial-program/national-map)



...except for NHDPlus ('medium resolution') which is managed by EPA (https://www.epa.gov/waterdata/nhdplus-national-hydrography-dataset-plus)

HMW DEMO