Drinking Water Data & Tools Guide

This page will help guide you to the most relevant drinking water datasets and data tools based on the question you are seeking to answer. The guide covers all the datasets and tools listed in EPA's Drinking Water Data and Tools Gallery. The gallery serves as a good starting point on your journey into drinking water data.

On this page:

What is the source of my drinking water?

Drinking water comes from a variety of sources, such as, rivers, streams, lakes, reservoirs, springs, and groundwater, which are referred to as "source water." Source water provides water to public water systems and private wells. Protecting source

water is important as it can reduce the risk of exposure to contaminated water and the need for costly and complex water treatment.

- Explore source water data tools.

Who provides my drinking water?

People receive their drinking water in a variety of ways, such as, through private wells or public water systems.

The EPA estimates there are more than 23 million private domestic wells providing drinking water to households in the United States. Density estimates of private wells by census blocks can be found in the Drinking Water Mapping Application to Protect Source Waters <https://geopub.epa.gov/dwwidgetapp/> or using the EPA Private Domestic Well Map <https://experience.arcgis.com/experience/be9006c30a2148f595693066441fb8eb/page/map/>. The quality and safety of drinking water from private domestic wells are not regulated by the EPA as these wells do not fall under the purview of the Safe Drinking Water Act.

Public water systems are regulated by the EPA to help protect public health. Most households in the United States get drinking water from a public water system, specifically, a community water system, which supplies water year-round to residents. There are more than 145,000 public water systems across the nation, of which 49,000 are community water systems.

- Explore drinking water private well density estimates. <https://experience.arcgis.com/experience/be9006c30a2148f595693066441fb8eb/page/map/>
- Use these tools to find which public water system may provide your drinking water.

How do I know the drinking water from my public water system is safe?

Public water systems are regulated under the Safe Drinking Water Act and must follow drinking water standards established by the EPA to help protect public health. The EPA delegates primary enforcement responsibilities of public water systems to states, territories, and Indian Tribes, also known as primacy agencies, if they meet certain requirements.

When drinking water standards are not met, primacy agencies or the EPA issue violations to public water systems. Primacy agencies also work with public water systems to help resolve issues that may be impacting drinking water quality.

- View tools dealing with public water system compliance with drinking water standards.

Who is testing the drinking water from my public water system?

Public water systems are required to test drinking water for a variety of contaminants based on the drinking water standards <https://epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations> that the EPA establishes under the Safe Drinking Water Act. The EPA delegates primary enforcement responsibilities of PWSs to states, territories, and Indian Tribes, also known as primacy agencies, if they meet certain requirements.

Some primacy agencies may conduct testing on behalf of the public water system based on prior arrangements. Additionally, some primacy agencies may establish stricter drinking water standards than those established by the EPA.

Community water systems, which are public water systems that serve water year-round to residents, are required to deliver a consumer confidence report, or CCR, to their customers each year by July 1. Learn more about CCRs <https://epa.gov/ccr/ccr-information-consumers>.

- Learn more about your primacy agency's drinking water program. <https://epa.gov/dwdata/primacy-agency-drinking-water-data>
- Use these tools to help you identify which public water system may be supplying your water.

What is my drinking water being tested for?

The EPA established drinking water standards that public water systems must follow are known as the national primary drinking water regulations <https://epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>. These regulations protect

public health by limiting the levels of contaminants in drinking water, such as, microorganisms and inorganic chemicals.

- Learn more about what your drinking water is being tested for with these tools.

What drinking water data are reported to the EPA?

National primary drinking water regulations <https://epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations> specify what drinking water data are required to be reported to the EPA. Drinking water data are collected by public water systems and then reported to the primacy agencies. The primacy agencies then report a subset of the drinking water data to the EPA where the EPA maintains these data in a federal database known as the Safe Drinking Water Information System, or SDWIS. The data reported to the EPA includes public water system inventories, violation information, and enforcement information.

- Visit the SDWIS Federal Reporting Services webpage. <https://epa.gov/ground-water-and-drinking-water/safe-drinking-water-information-system-sdwis-federal-reporting>

Who regulates drinking water on airplanes?

The Aircraft Drinking Water Rule, or ADWR, ensures that safe and reliable drinking water is provided to aircraft passengers and crew. Drinking water on airlines is jointly regulated by the EPA, the Food and Drug Administration, and the Federal Aviation Administration. Learn more about the ADWR <https://epa.gov/dwreginfo/aircraft-drinking-water-rule>.

- Visit the ADWR Compliance Reports system. <https://epa.gov/dwreginfo/adwr-compliance-reports>

What are the drinking water infrastructure needs across the U.S.?

The Safe Drinking Water Act requires that the EPA examine the needs for infrastructure improvements and maintenance at public water system in the U.S. The EPA conducts a survey and assessment approximately every four years to determine the financial needs of the nation's drinking water infrastructure over the next twenty years. The survey and assessment are known as the Drinking Water Infrastructure Needs Survey and Assessment, or DWINSA. The DWINSA is also used to allocate annual Drinking Water State Revolving Fund grants to states. Besides DWINSA's state-level estimates, there are other tools for gaining insight into potential infrastructure needs which take into consideration the age of water infrastructure, water system compliance with drinking water standards, community characteristics, and prior funding history.

- Use these tools to explore drinking water infrastructure needs across the nation.

How is drinking water infrastructure funded?

Drinking water infrastructure makes it possible for clean, safe drinking water to reach consumers. As drinking water infrastructure across the nation ages or as communities grow, it needs to be replaced or expanded. The EPA helps connect public water systems with federal funding through the implementation of different funding programs, such as, the Drinking Water State Revolving Fund, the Water Infrastructure Finance and Innovation Act Program, as well as various grant programs.

- Use these tools to explore drinking water infrastructure funding across the nation.

How can drinking water systems access assistance?

The EPA has resources available to help public water systems build their technical, managerial, and financial (TMF) capacity. TMF capacity is necessary to achieve and maintain long-term sustainability and compliance with nation safe drinking water regulations. The EPA offers free Water Technical Assistance (WaterTA) to connect communities to experts for help assessing and implementing solutions for their drinking water, sewage, and stormwater needs. Learn more about building the capacity of drinking water systems <https://epa.gov/dwcapacity>. Explore WaterTA initiatives and resources <https://epa.gov/water-infrastructure/water-technical-assistance-waterta>.

- Explore technical assistance and capacity building tools and data for drinking water systems.

How can public water systems increase their resilience against threats like severe weather events and cyber-attacks?

Public water systems are considered critical infrastructure and, therefore, it is essential that water professionals know how to protect, detect, respond, and recover to threats like severe weather or cyber-attacks. Increasing public water system resilience helps maintain safe drinking water access. Learn more about Drinking Water and Wastewater Resilience <https://epa.gov/waterresilience> and Emergency Response for Drinking Water and Wastewater Utilities <https://epa.gov/waterutilityresponse>.

- Use these tools to help support and learn more about your public water system's resilience and emergency preparedness.

What is the EPA doing about unregulated contaminants?

Every five years, the EPA collects data on contaminants not currently regulated by the EPA through the Unregulated Contaminant Monitoring Rule, or UCMR. These data are used to determine the occurrence of priority contaminants in drinking water and their estimated exposure levels. The EPA uses the UCMR data to support future regulatory determinations and development of national primary drinking water regulations for new contaminants. Learn more about the Unregulated Contaminant Monitoring Rule <https://epa.gov/dwucmr>.

- View data and tools related to unregulated contaminants.

Where can I find additional EPA data or tools?

Use these tools to explore additional EPA datasets and tools beyond those related to drinking water:

- Additional Resources

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