



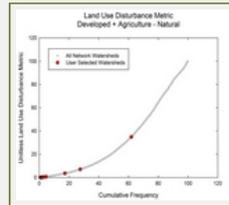
The National Network of Reference Watersheds

[About NNRW](#)[Core Watersheds](#)[Watershed Search](#)[User Guide](#)[Cooperators](#)

The **National Network of Reference Watersheds** is a collaborative and multipurpose network of minimally disturbed watersheds and monitoring sites. The purpose of this website is to allow users to search the NNRW database of reference watersheds, to identify watersheds of interest, and download watershed information and water quality data. The current scope of the network is limited to freshwater streams. Membership in the network is voluntary and open to individuals, agencies, and institutions interested in participating in monitoring and (or) research in minimally disturbed and pristine watersheds.

WHAT IS A REFERENCE WATERSHED?

The NNRW defines reference watersheds as those minimally disturbed by human activity preferably in an area protected from human-induced changes. Reference watersheds can be used to measure changes in soil chemistry, vegetation, water quality, and biology through time as well as to compare to disturbed watersheds.



The network is currently composed mainly of U.S. Geological Survey and U.S. Environmental Protection Agency watersheds however, as the network expands watersheds will be added from other Federal, State, tribal, interstate, academic, local and private sector organizations that choose to participate.

The "Watershed Search" section of the website allows users to search the entire network database. The database includes many types of reference watersheds; some are considered reference based on low hydrologic disturbance, others based on land use disturbance, and others based on water quality, stream biology, or some combination of criteria. Results of users searches can be placed into context with all watersheds in the database on cumulative frequency diagrams like the one to the right.

The "Core Watersheds" section of the website allows users to search a subset of the NNRW database that contains only the most pristine watersheds based on specific land use criteria. Core watersheds also have stream discharge data available.

Select the "Core Watersheds" tab to explore the most pristine watersheds in the network or select the "Watershed Search" tab to search the entire NNRW database of reference watersheds and access data available for those sites.

If you would like to submit a watershed or a group of watersheds to be included in the network please contact [Mike McHale](#)

TODAY'S FEATURED WATERSHED

[Cache Creek](#)



The Cache Creek Basin is located in western Wyoming. Cache Creek drains about 27 km² of steep mountain and canyon terrain in the Gros Ventre Mountains...

WATERSHEDS WHERE I LIVE

Find a **Core Reference Watershed** near your location
Input either a 5 digit zip code or latitude and longitude (in decimal degrees).

Zipcode: Latitude:

Longitude:

Goals of the Reference Watershed Working Group

- ◆ Provide access to documented quality data and information from minimally or least disturbed watersheds to be used in assisting with establishing “background” conditions for select hydrologic variables and water-quality.
- ◆ Increase the efficiency of monitoring with improved coordination and collaboration and increased opportunities to leverage existing reference sites, networks, and financial resources

Web address:

<https://my.usgs.gov/nnrw/>

What we're working on now

1. Compiling all of the QW data and using that to refine the Core Watersheds list
2. Automating the process to upload new sites with a focus on the EPA Regional Monitoring Network sites (State Sites)

Skills Needed

1. GIS Skills
2. R skills
3. Folks willing to help follow up on potential members (particularly federal partners: Park Service, Forest Service, BLM)
4. mmchale@usgs.gov