

WATERS

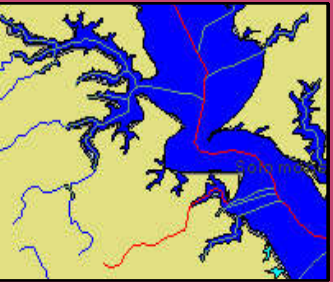
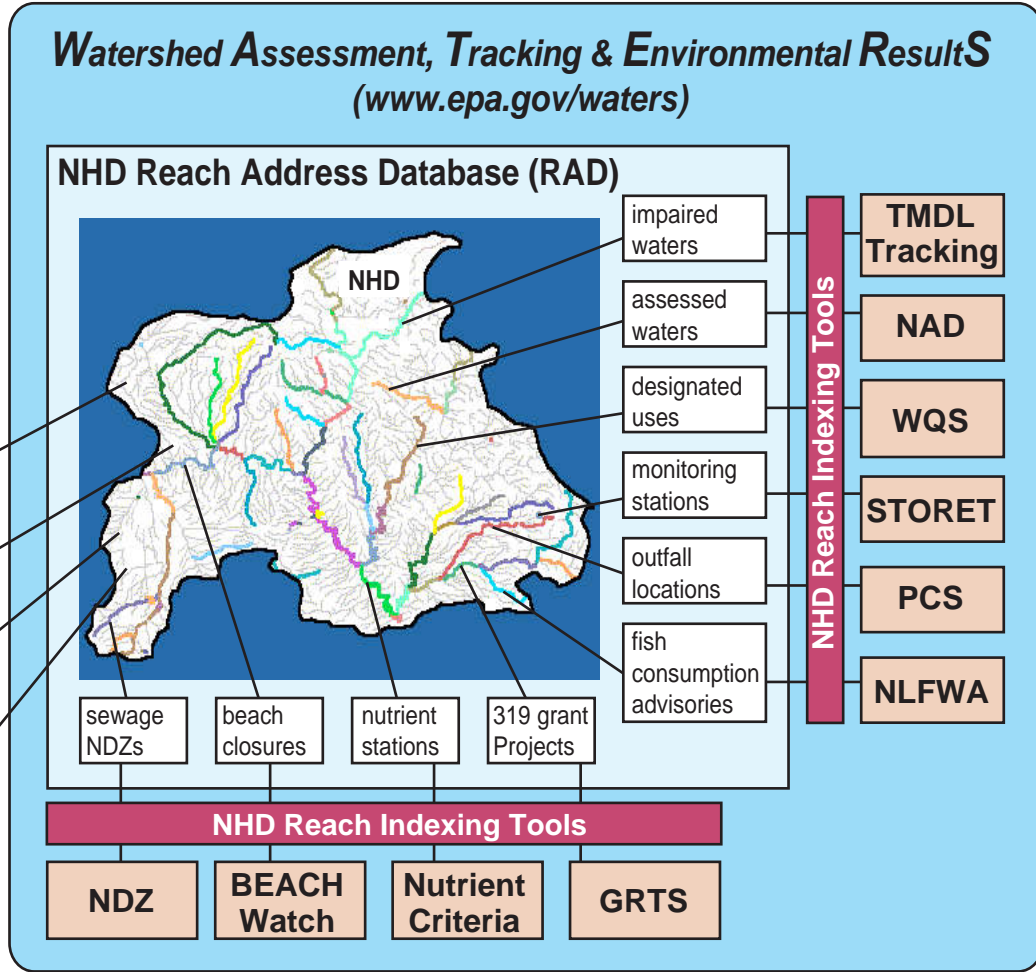
unifies geography-specific water quality information previously available only on individual state web sites and various EPA web sites. WATERS (Version 2.0), which provides direct access to an expanded list of information sources, is now available.

Total WATERS

Web RIT

Ask WATERS

EnviroMapper for Water

What is WATERS?

WATERS is a data architecture that integrates information from various EPA Office of Water programs by linking it to the national surface water network. Through WATERS, environmental professionals and interested citizens can access comprehensive information about the quality of the Nation's surface water. By clicking on an interactive Web-based map, users can simultaneously display the locations and associated information for:

- the designated use(s) of a waterbody
- water quality monitoring stations
- assessments of water quality
- causes and sources of impaired waters
- public beaches
- no discharge zones for vessel sewage

Linking Water Quality Information

Numerous EPA programs pursue clean and safe water. These programs generate large amounts of information stored across many different EPA databases. WATERS improves program efficiency, communication, and analytical capacity by linking these databases so the water quality information they contain can easily be shared and combined. These linkages enable program managers to examine relationships between programs, perform nationwide analyses, and investigate interstate water quality issues.

WATERS uses the surface water network defined within the National

Hydrography Dataset (NHD) as the geographic framework for linking and integrating water quality information. The NHD was produced and is jointly maintained by the EPA, U.S. Geological Survey, and other federal and state cooperators.

Future Releases

Future releases of WATERS will include information on fish consumption advisories, non-point source projects to control polluted runoff, and facility discharges. Also planned is the ability to calculate total river miles and waterbody acres for a given area and to answer multi-program questions that draw on information from the databases linked through WATERS.

WATERS -- WATERS is a data architecture that integrates information from various EPA Office of Water programs by linking it to the national surface water network. WATERS consists of three parts:

1. NHD Reaches -- The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data that contains information about surface water features. Within the NHD, surface water features are combined to form waterbody segments called "reaches," which provide the framework for linking water-related data to the NHD surface water drainage network in a manner similar to street addresses.

2. NHD Reach Addressing Database (RAD) -- The NHD Reach Addressing Database (RAD) stores the stream addresses of program features that have been linked to the NHD reaches. These stream addresses indicate the spatial extent of program features.

Stream addresses stored in NHD RAD

3. Office of Water program database -- The EPA Office of Water (OW) has various programs that store water quality information in associated databases. By linking records, or "features," from the program databases to the NHD, this information can be shared across programs to better facilitate water quality management.

WATERS Tool that uses information from the RAD -- Tools and applications that generate and use the stream addresses from the NHD-RAD to query and display water information across programs.

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