



Watershed Assessment, Tracking & Environmental ResultS (WATERS)

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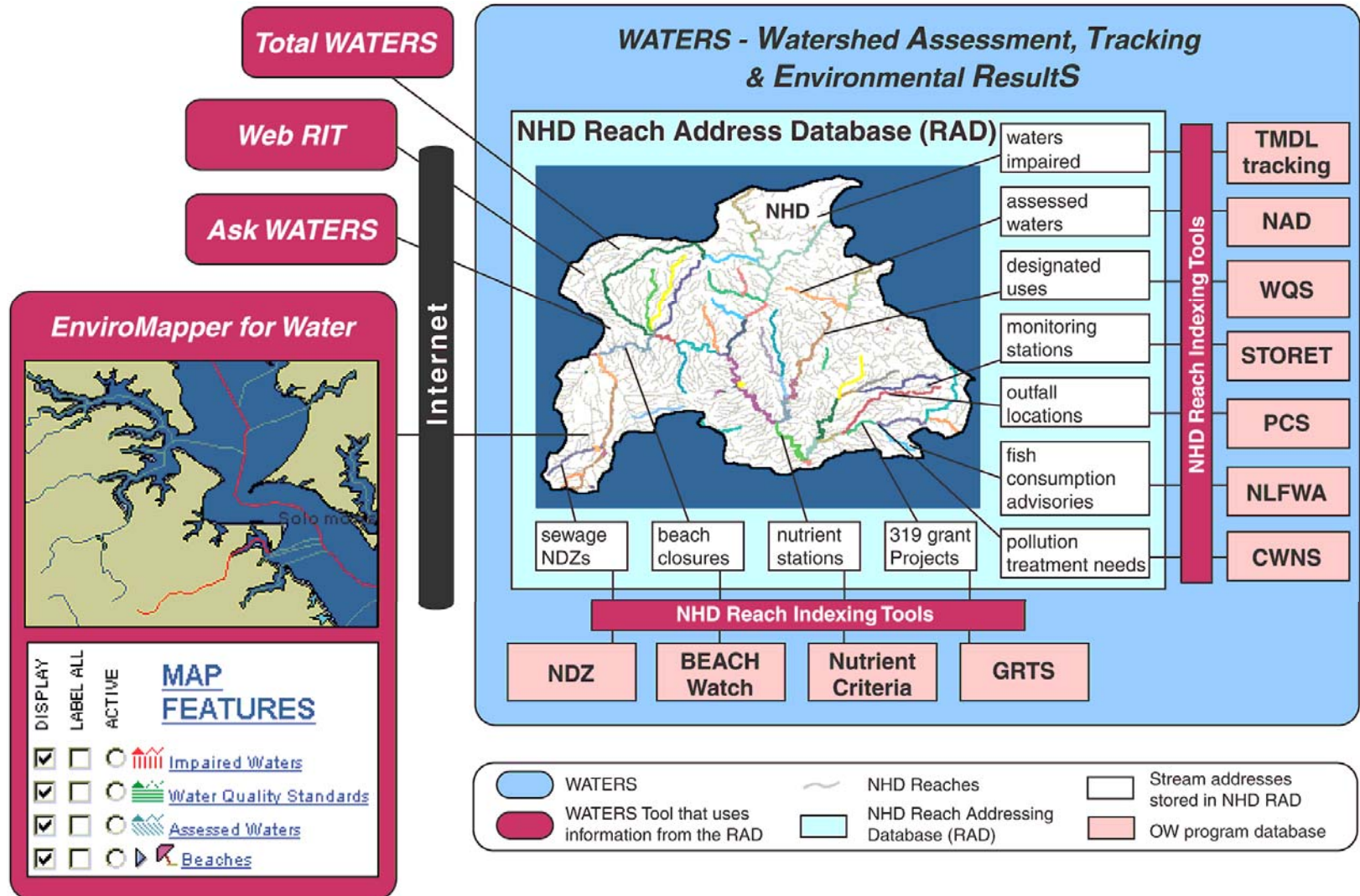
Watershed Assessment, Tracking & Environmental Results (WATERS)

- **WATERS** is an integrated information system for the nation's surface waters;
- Databases have traditionally been managed by individual Water Programs, inhibiting data integration;
- **WATERS** data connected to NHD;

[\(http://www.epa.gov/waters/\)](http://www.epa.gov/waters/)



WATERS – System Architecture



WATERS – Data (in progress)

- EPA Office of Water data being linked includes:
 - **Water Quality Standards Database (WQSDB)**
Waterbody designated uses, such as, drinking water supply, recreation, and fish protection;
[\(http://www.epa.gov/wqsdatabase/\)](http://www.epa.gov/wqsdatabase/)
 - **National Assessment Database (NAD)**
305(b) Assessed waters classified as either Fully Supporting, Threatened, or Not Supporting their designated uses.
[\(http://www.epa.gov/waters/305b/\)](http://www.epa.gov/waters/305b/)



WATERS – Data (in progress - cont'd)

- **Total Maximum Daily Load (TMDL) Tracking System** contains information on waters Not Supporting designated uses, which are listed by states as impaired under Section 303(d); Tracks status of TMDLs, which are pollution control measures that reduce the discharge of pollutants into impaired waters.

[\(http://www.epa.gov/waters/tmdl/\)](http://www.epa.gov/waters/tmdl/)

TMDL Formula:

$$\text{WLA} + \text{LA} + \text{MOS} = \text{TMDL}$$

The TMDL equation follows:

WLA = Waste Load Allocation - (Amount of pollutant from existing/future point sources)

LA = Load Allocation - (Nonpoint source and natural background loads)

MOS = Margin of Safety- (Part of the TMDL is allocated to the MOS to account for the lack of certainty regarding how the water will respond to changes in loadings.)

WATERS – Data

(in progress - cont'd)

- **Permit Compliance System (PCS)** stores data about NPDES facilities, permits, compliance status, and enforcement activities for up to six years;

<http://www.epa.gov/enviro/html/pcs/index.html>

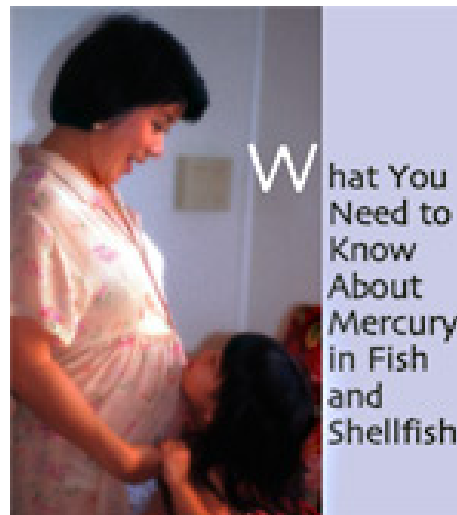
- **Safe Drinking Water Information System (SDWIS)** information about public water systems and their violations of EPA's drinking water regulations; Statutes and accompanying regulations establish maximum contaminant levels, treatment techniques, and monitoring and reporting requirements to ensure that water is safe for human consumption;

<http://www.epa.gov/enviro/html/sdwis/index.html>

WATERS – Data (in progress - cont'd)

- **National Listing of Fish and Wildlife Advisories (NLFWA)** database includes all available information describing state-, tribal-, and federally-issued fish consumption advisories in the United States and Canada;

[\(http://map1.epa.gov/\)](http://map1.epa.gov/)



WATERS – Data

(in progress - cont'd)

- **Grants Reporting and Tracking System (GRTS)** electronically tracks projects and activities funded under CWA Section 319(h) non-point source pollution program;
(<http://www.epa.gov/nps/Section319/grts.html>)
- **Nutrient Criteria Database** stores and analyzes nutrient water quality data and is an information resource for states, tribes, and others in establishing scientifically defensible numeric nutrient criteria;
(www.epa.gov/waterscience/criteria/nutrient/database/index.html)

WATERS – Data (in progress - cont'd)

- **Beach Advisory and Closing Online Notification (BEACON)** information on whether a specific beach is being monitored for water quality, who is responsible for the monitoring, the pollutants monitored, and if advisories or closures have been issued;
(oaspub.epa.gov/beacon/beacon_national_page.main)

- **New England Beaches**



(www.epa.gov/ne/eco/beaches/)



WATERS – Data (in progress - cont'd)

- **No-Discharge Zone (NDZ)** Section 312 of the CWA allows states to designate No Discharge Zones for vessel discharge to protect human and aquatic health;



WATERS – Data (in progress - cont'd)

- **Clean Watersheds Needs Survey (CWNS)** conducted every 4 years provides information on publicly-owned wastewater collection and treatment facilities, facilities for control of sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), stormwater control activities, nonpoint sources, and programs designed to protect the nation's estuaries;

<http://www.epa.gov/owm/mtb/cwns/index.htm>



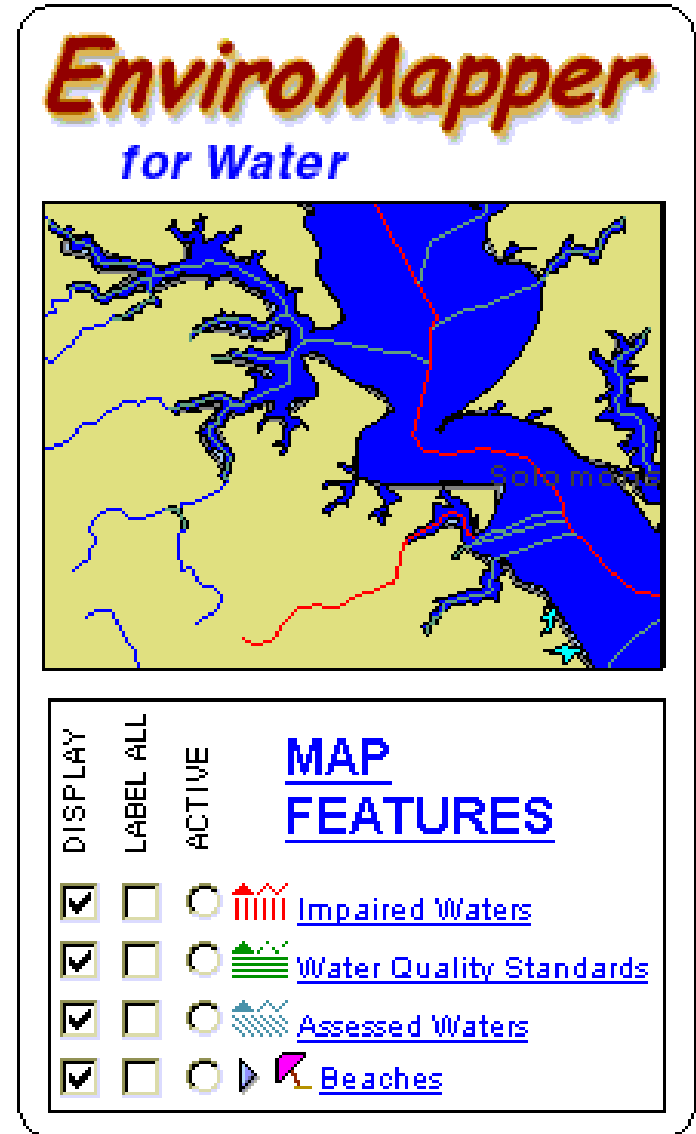
Reach Address Database (RAD)

- **RAD** stores the reach address of each Water Program feature that has been linked to the underlying surface water features (streams, lakes, etc) in the NHD;
- Data downloads available as:
 - State or HUC (~watershed) shapefiles;
 - National shapefiles;

(<http://www.epa.gov/waters/data/downloads.html>)

Enviromapper for Water

- **Enviromapper for Water** dynamically displays web-based information about U.S. bodies of water;
- Interactive tool allows you to create customized maps that portray the nation's surface waters along with a collection of environmental data;



(www.epa.gov/waters/enviromapper/index.html)