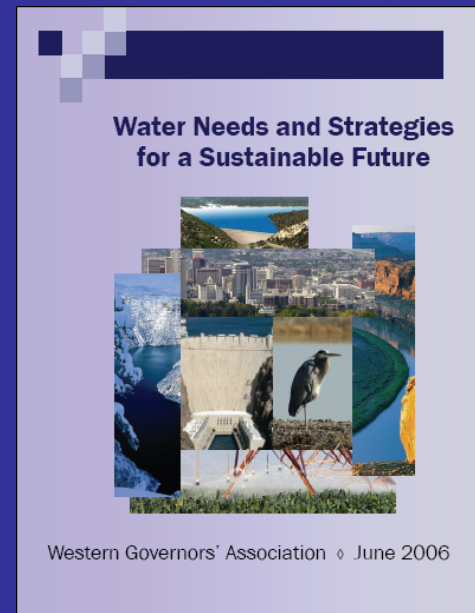


2002

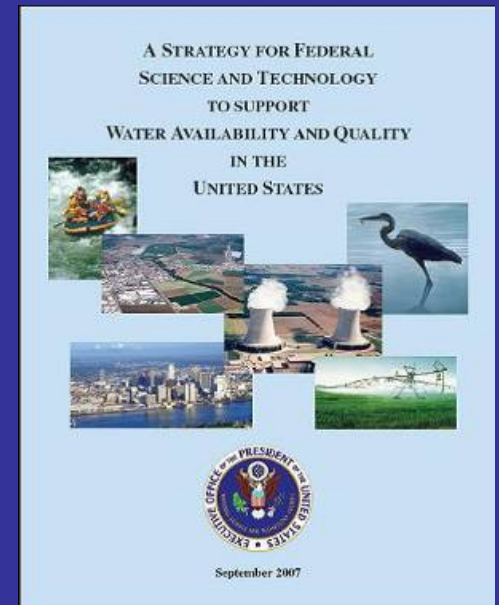
National
Water
Availability
Pilot
Study on
the Great
Lakes



2006



2005



2007

Gains



Interbasin Transfers
and Return Flows

Surface Water

Available

Ecological and other
Instream Needs

Poor Water Quality

Recharge

Base Flow

Ground Water

Available

Ecological Needs
and Human Uses

Poor Water Quality

Precipitation

Losses



Stream runoff and baseflow



Withdrawals



Consumptive Use



Evapotranspiration

Gains



Interbasin Transfers
and Return Flows

Surface Water



Recharge

Base Flow

Ground Water



Losses

Available Water

Precipitation

$$\text{Precipitation} + \text{Inflow} = \text{Evapotranspiration} + \text{Change in Storage} + \text{Outflow}$$

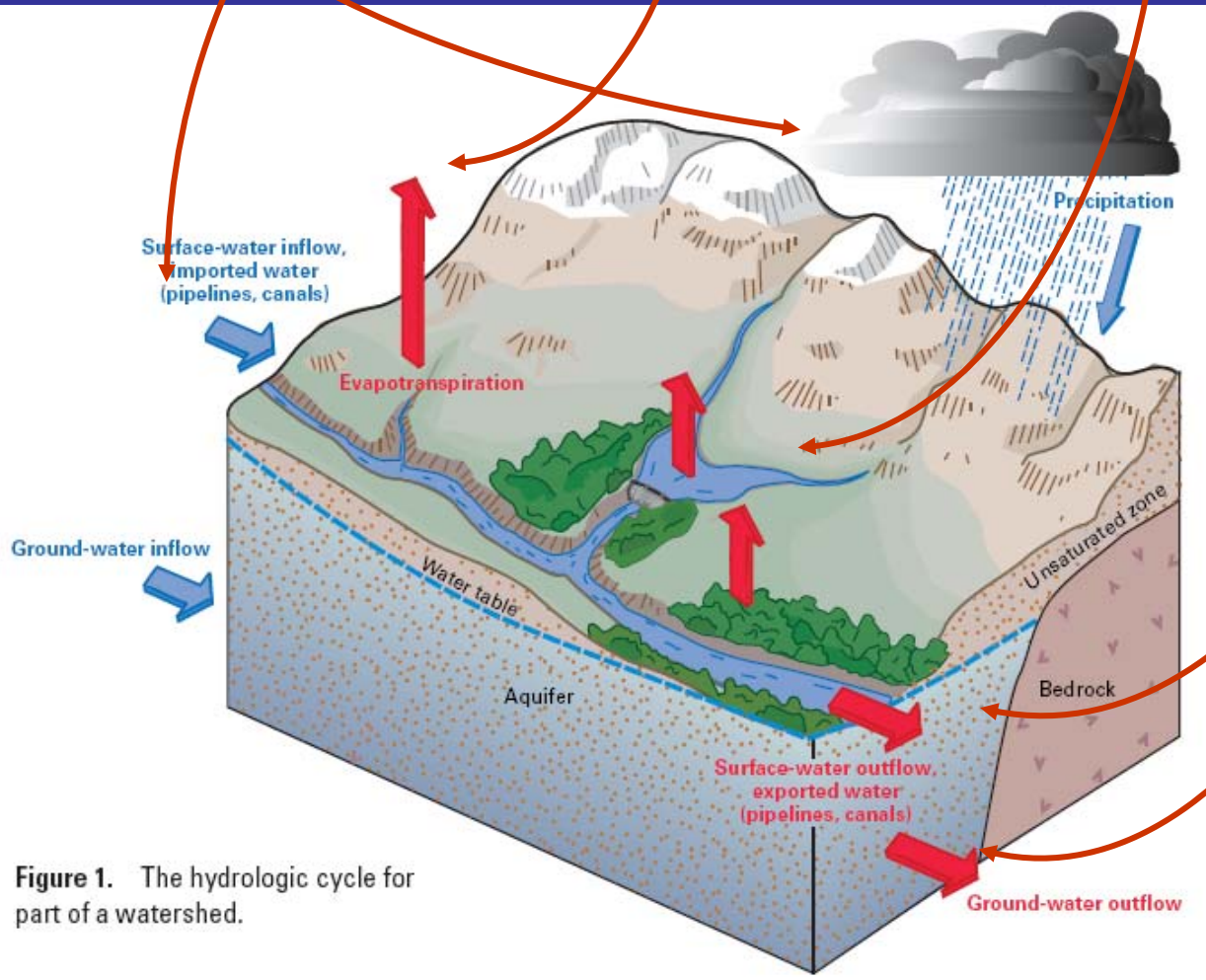
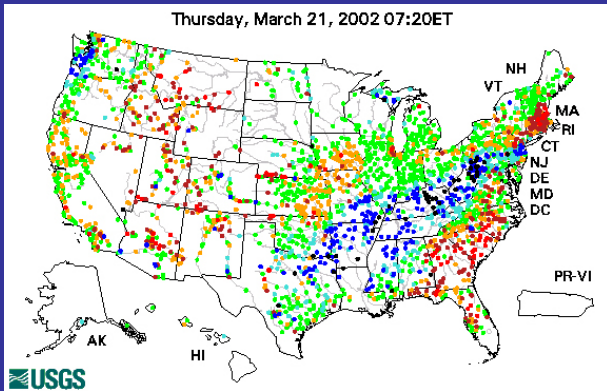
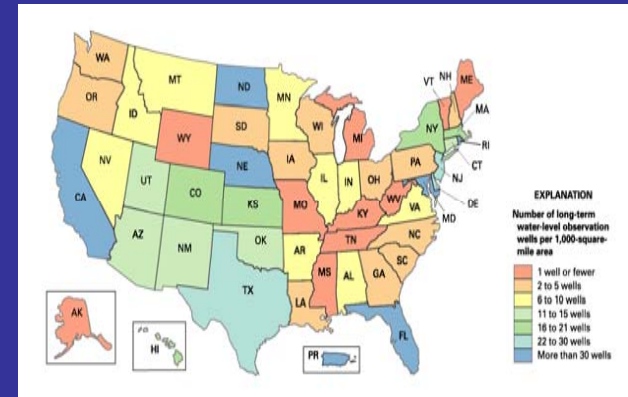


Figure 1. The hydrologic cycle for part of a watershed.

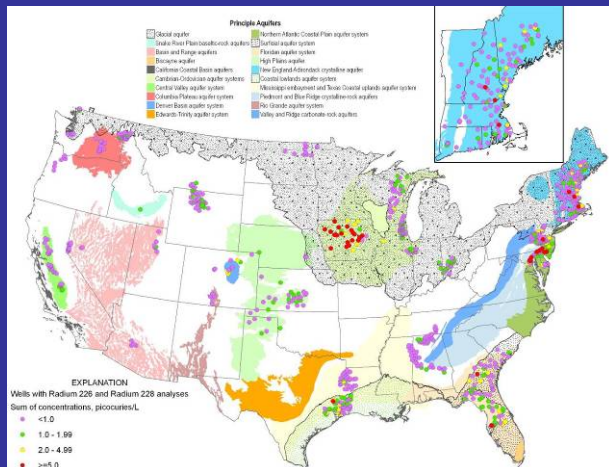


Streamflow and precipitation



Ground-water levels

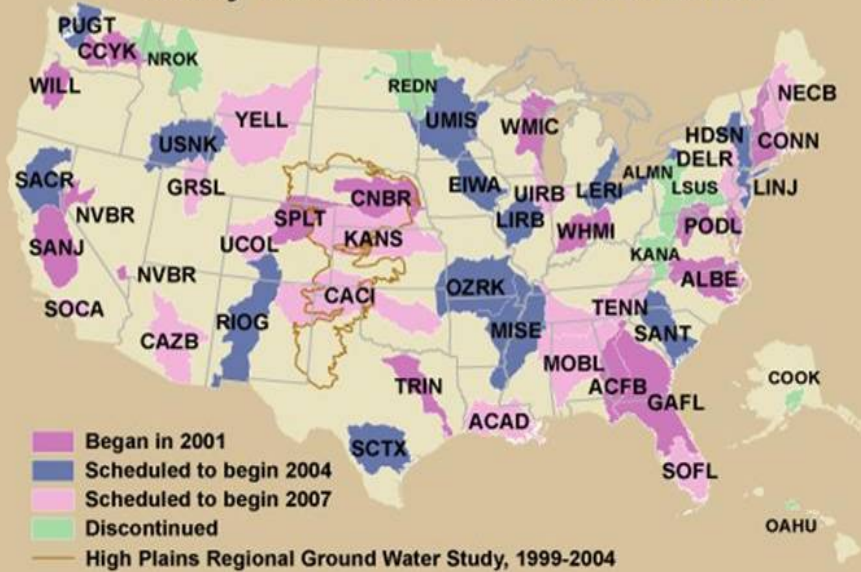
Water Quality



Biomonitoring

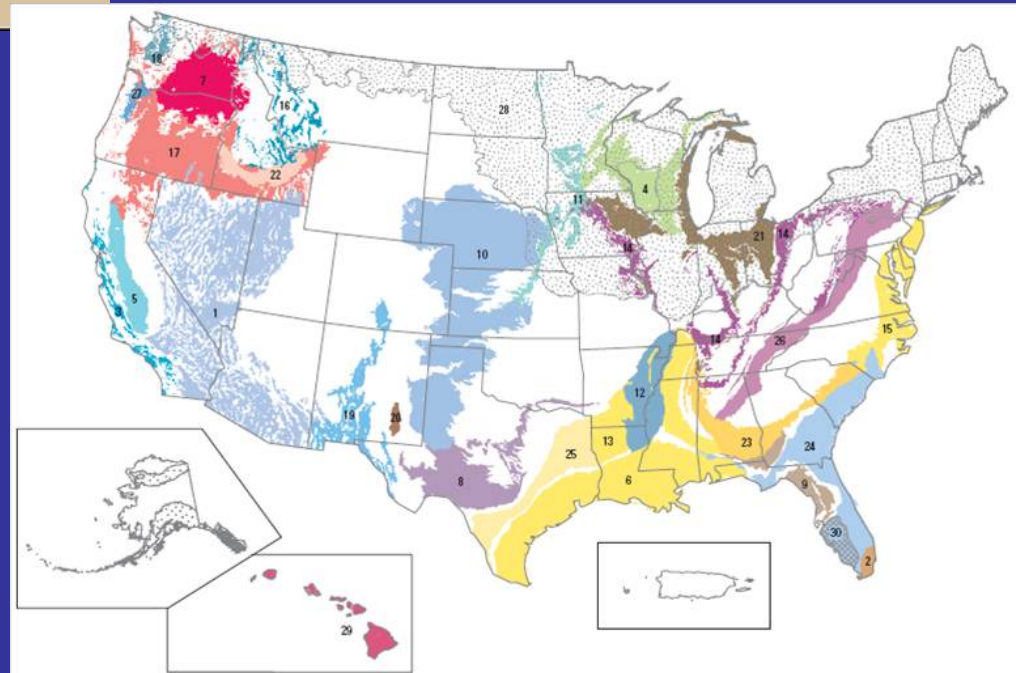


National Water-Quality Assessment Program Study Units Scheduled for 2001-2012



Ground-Water Resources Program

NAWQA



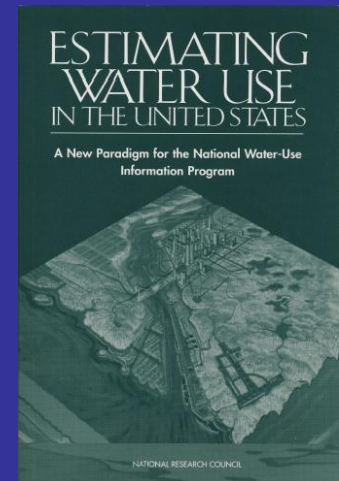
The Water for America Initiative will devote resources to:

–Expansion and Modernization of the Streamgaging Network

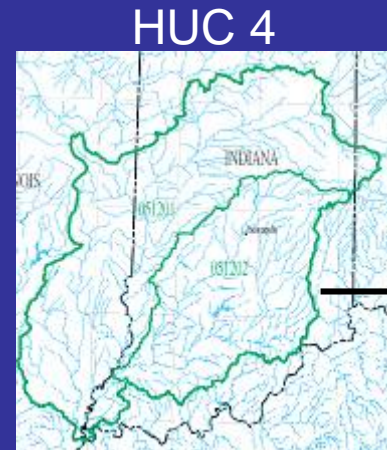
- Add 350 high data rate radios per year
- Re-establish 50 streamgages recently discontinued



–Water Use Science Program and Database Enhancements needed to manage and serve information



–The Regional Assessment Studies and Focus Area Research Studies.



–Advance Geologic Mapping of Aquifers

- Cooperation with State Geologic Surveys.



GREAT LAKES BASIN PILOT PROJECT



U.S. Army Corps of Engineers, Detroit District

<http://water.usgs.gov/wateravailability/greatlakes>