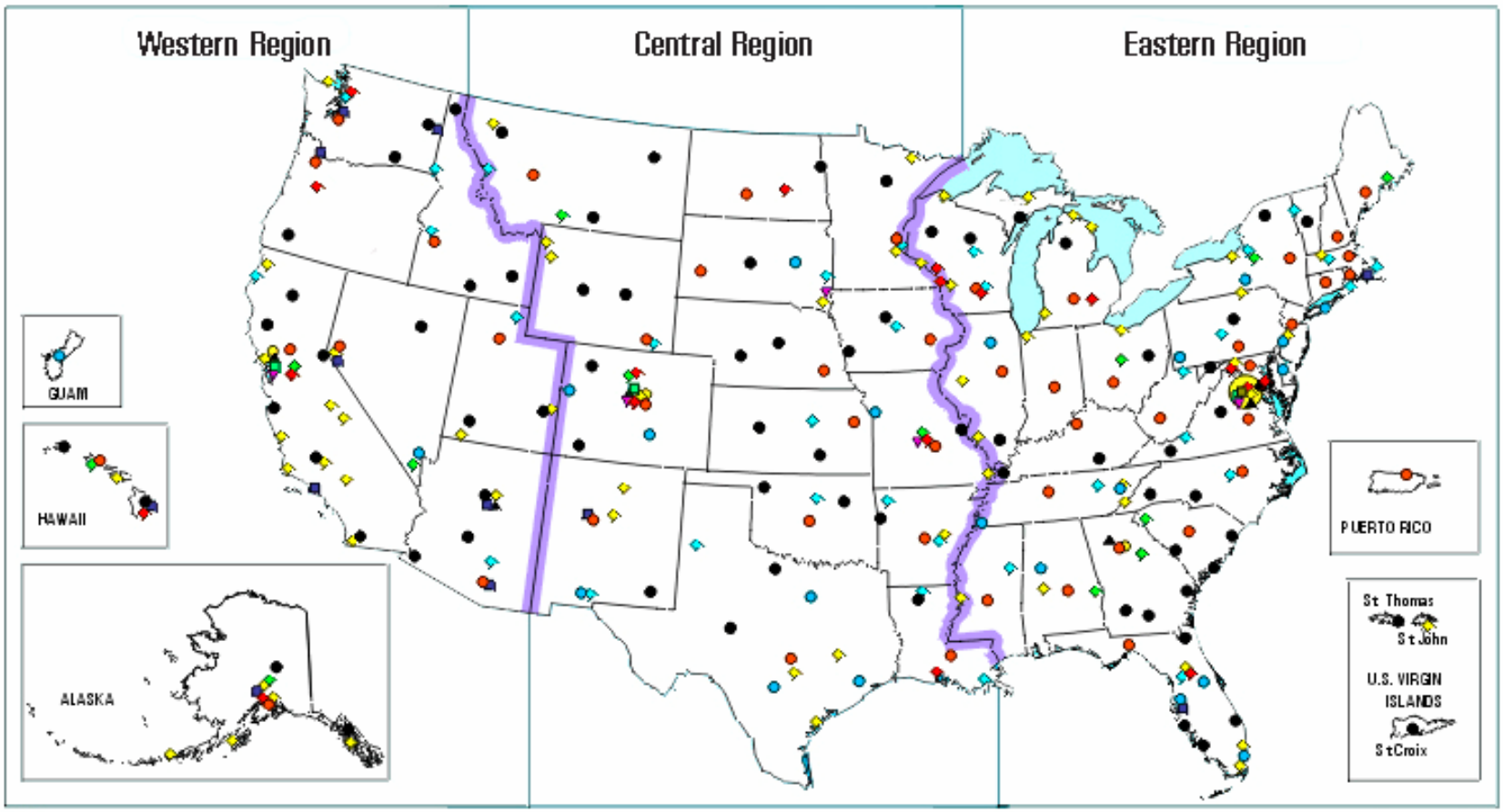
Overview of the U.S Geological Survey

U.S Geological Survey

Biology Geology Mapping Water



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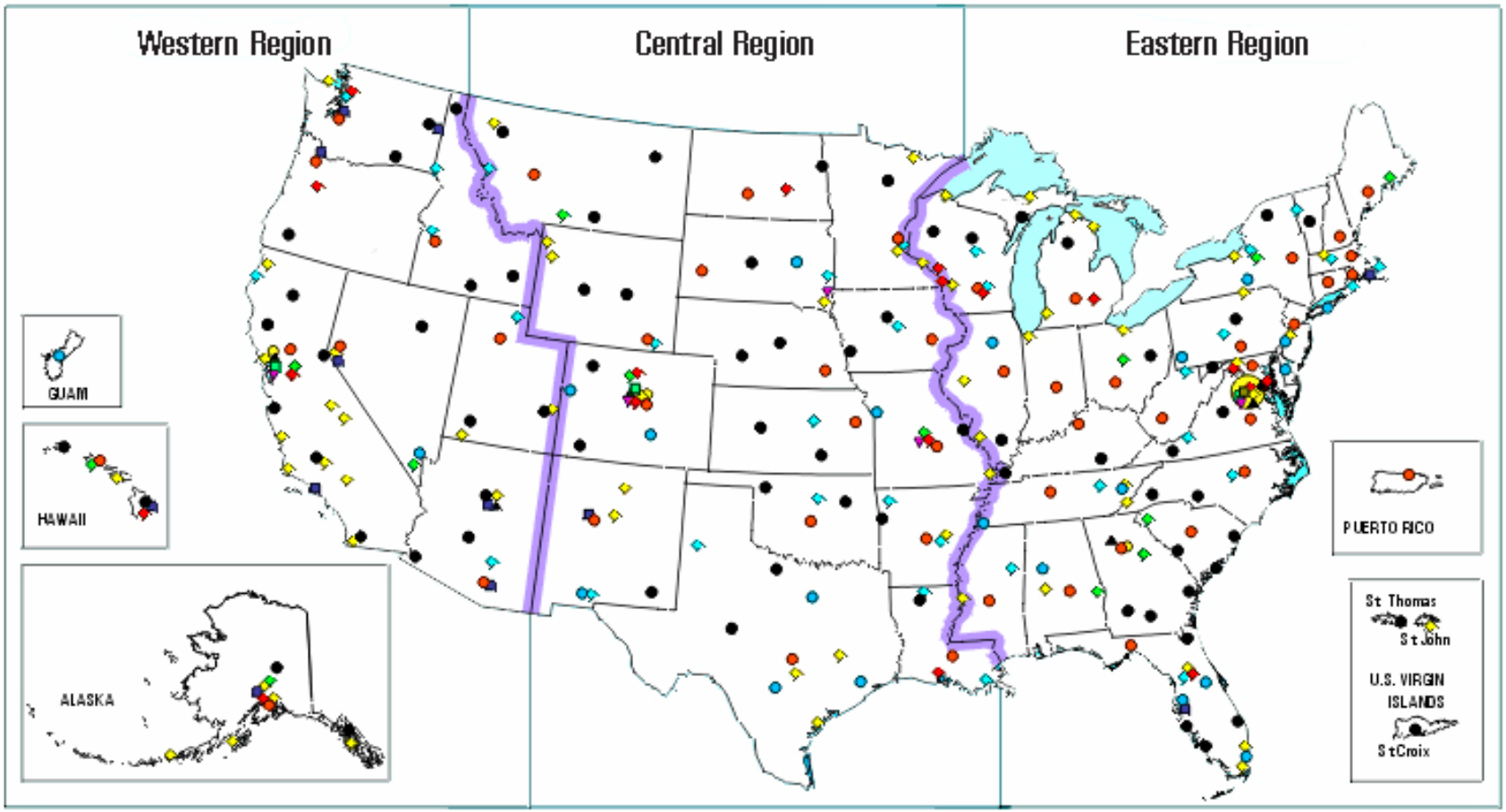


USGS has locations throughout the country.

Overview of the U.S Geological Survey

USGS State Programs

→ Federal-State Cooperative Studies (COOP)

USGS State Programs (a few of many)

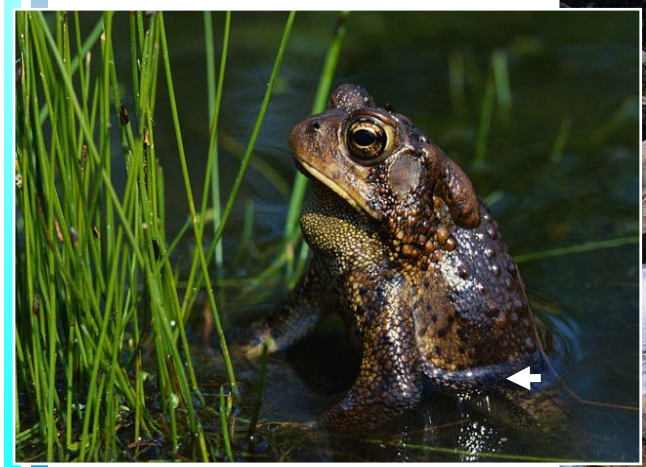
→ Toxic Substances Hydrology Program (TOXICS)

→ National Streamflow Information Program (NSIP)

→ National Water-Quality Assessment Program (NAWQA)

Breadth of USGS Studies

- → Field Monitoring/ Assessment
- → Analytical Methods/ Controlled Lab Research
- → Source Pathways/Watershed Process, Transport, Fate
- → Human/Biota Effects



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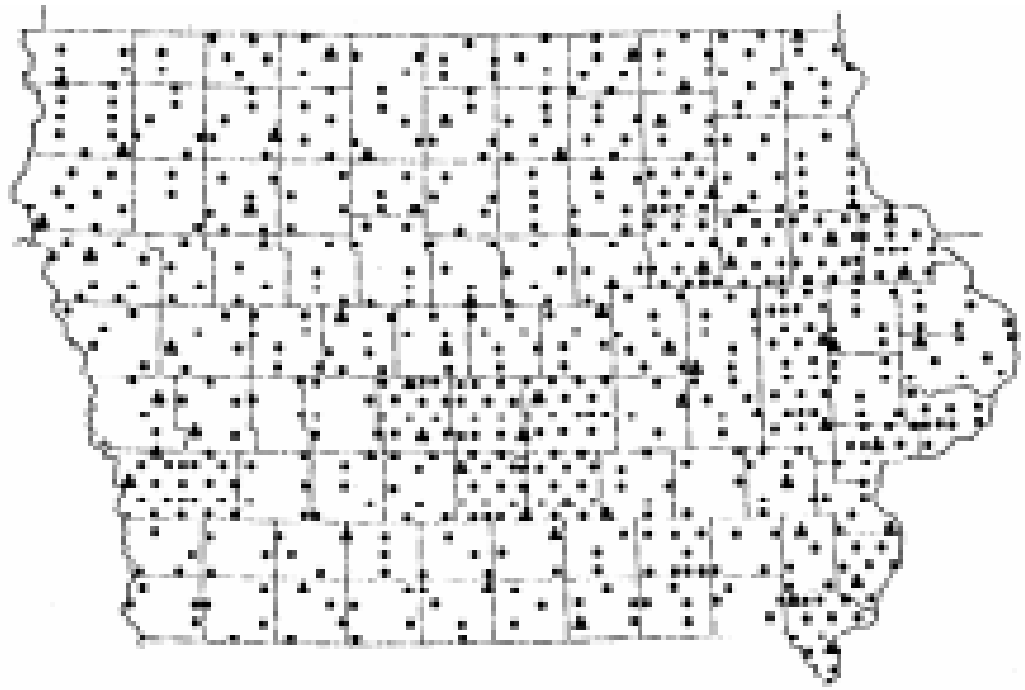
Federal-State Cooperative Studies (COOP)

State-Wide Rural Well-Water Survey (SWRL)

http://www.igsb.uiowa.edu/inforsch/swrl.htm



→ April 1988 to June 1989

→ Potential for repeating soon

→ 698 sites

→ Total coliform bacteria, nitrate, ammonium, organic-N, major ions; 27 pesticides, 5 metabolites

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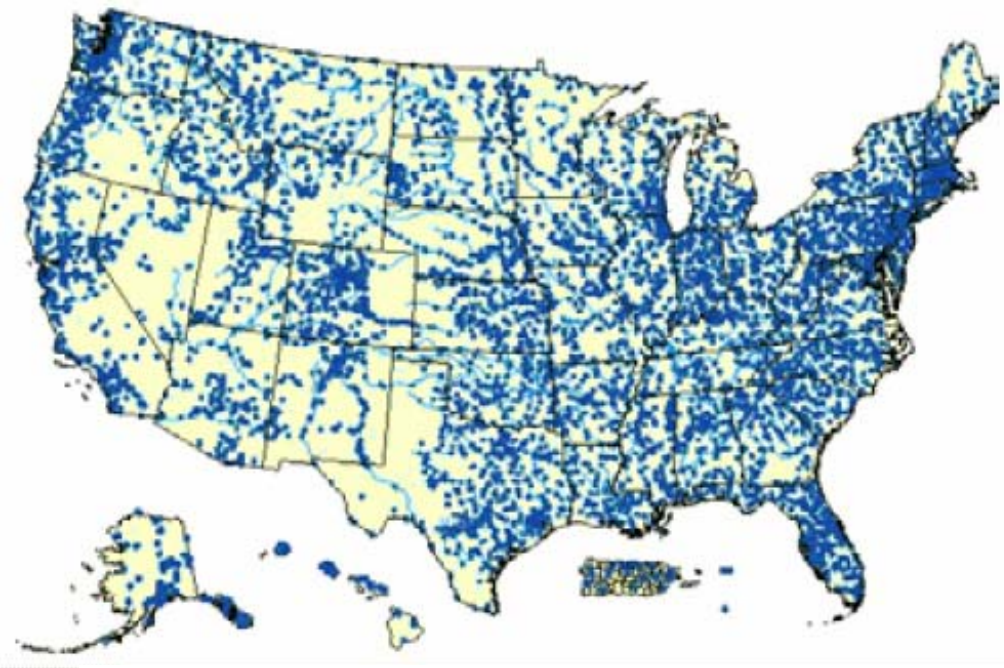
Toxic Substances Hydrology Program (TOXICS)

National Streamflow Information Program (NSIP)



About 7,000 stream gages with about 850,000 station years of time-series data

Many provide real-time data on the Internet.

Overview of the U.S Geological Survey

National Water-Quality Assessment Program (NAWQA)

Components

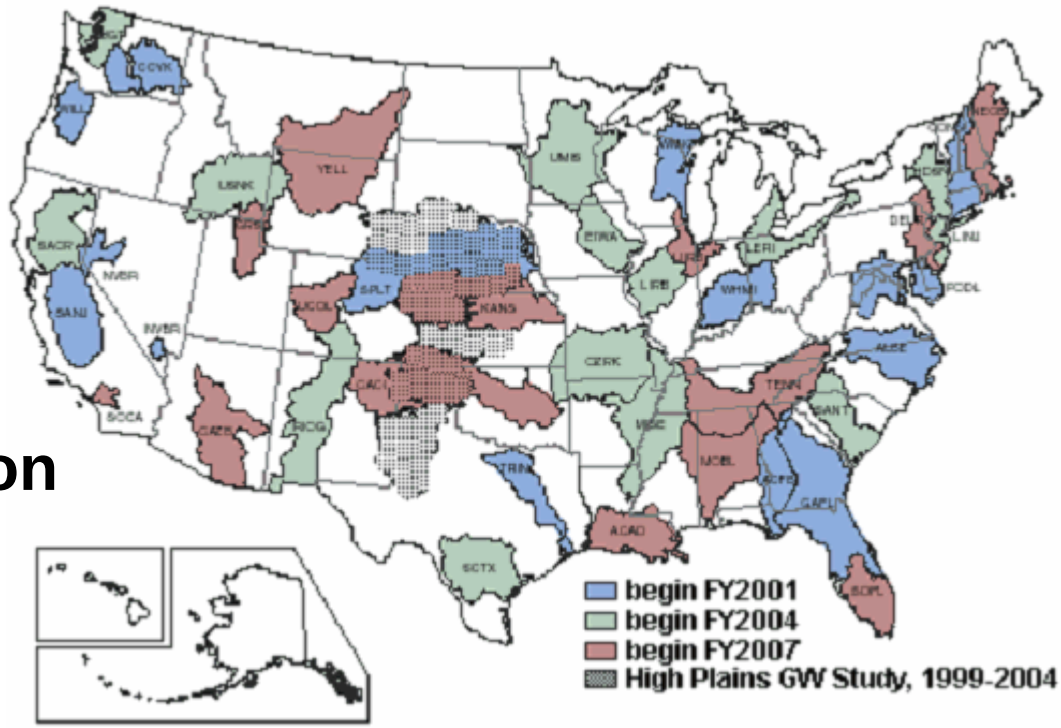
→ Study Units

→ Synthesis

- Pesticides
- Nutrients

→Topical Studies

- Hg Bioaccumulation
- GW Contaminants
- Ag Chemicals
- Nutrients
- Urban Effects



Themes: Status → Trends → Understanding

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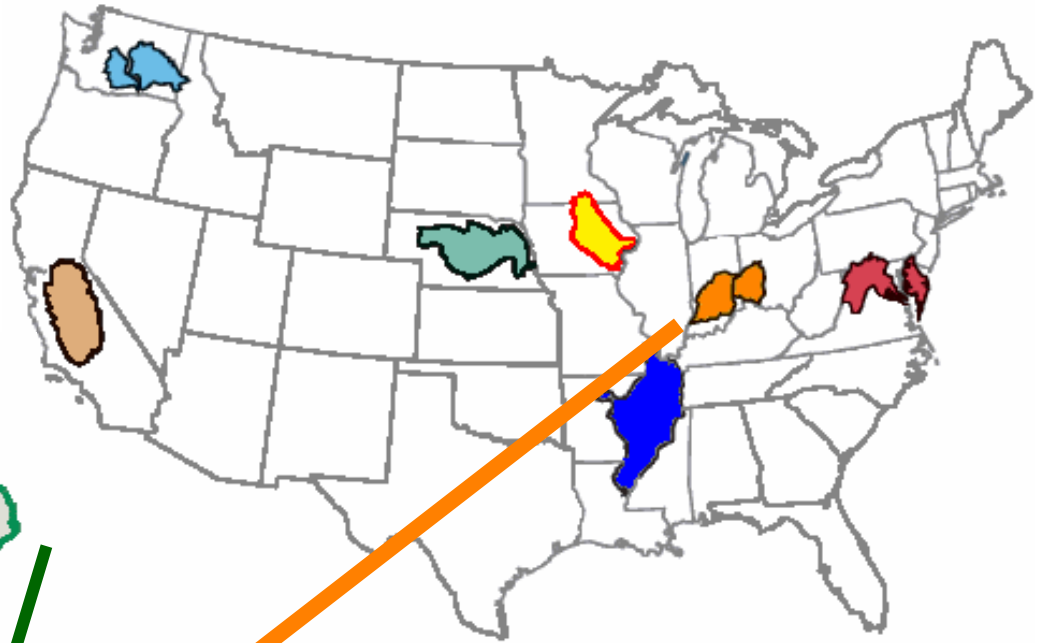
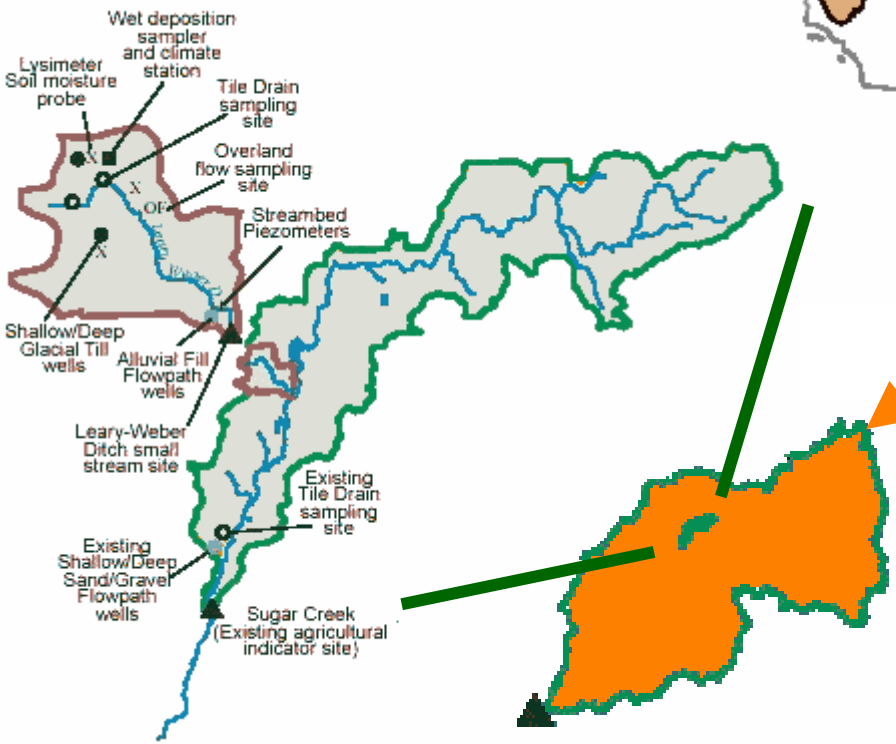
NAWQA Ag Chemicals Studies (ACT)





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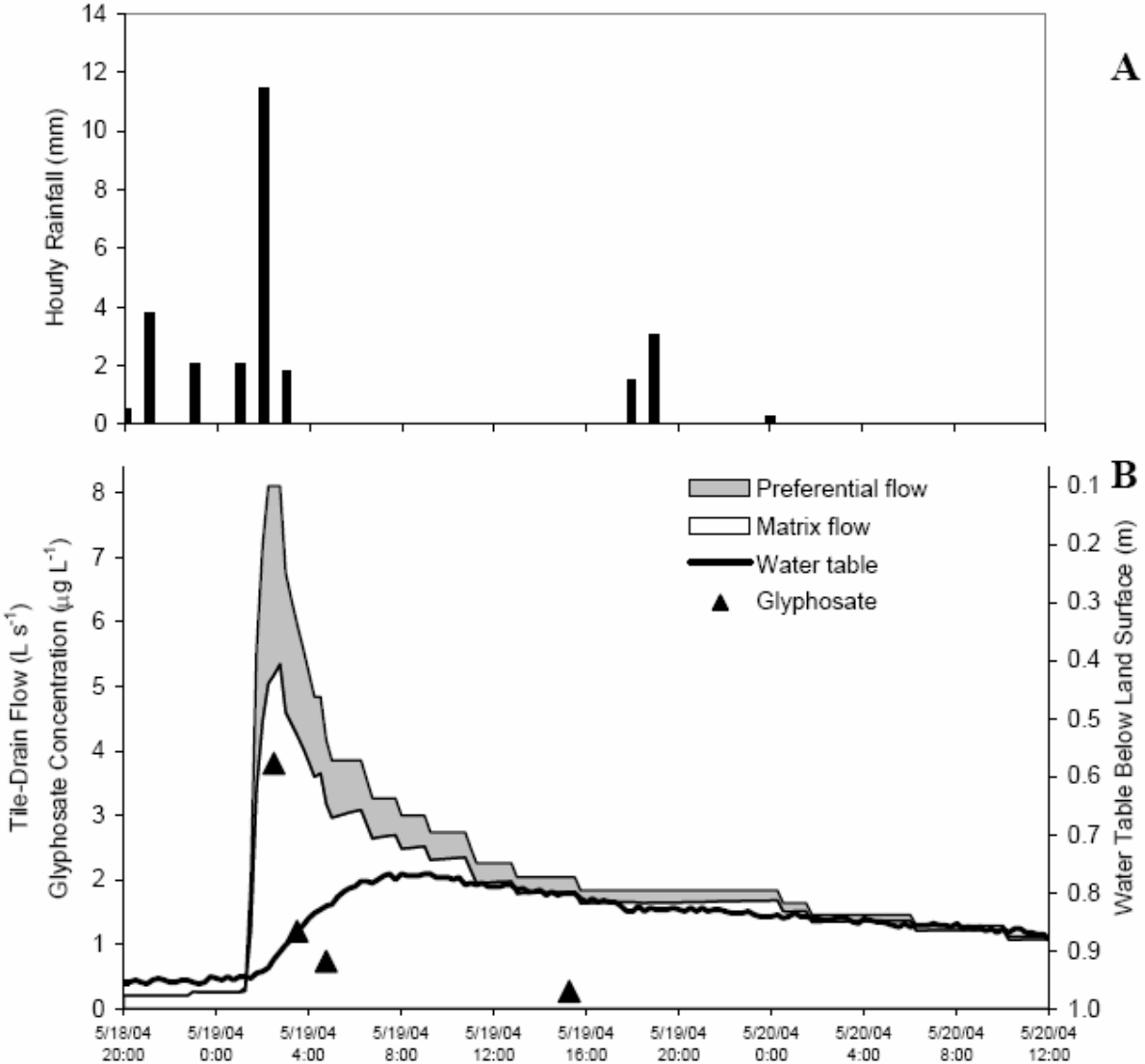
Tile Drain

Response to a storm event

Indiana Study May 19, 2004



NAWQA Nutrients Study (NEET)

Washington

Delaware

Nebraska

Florida

Indiana

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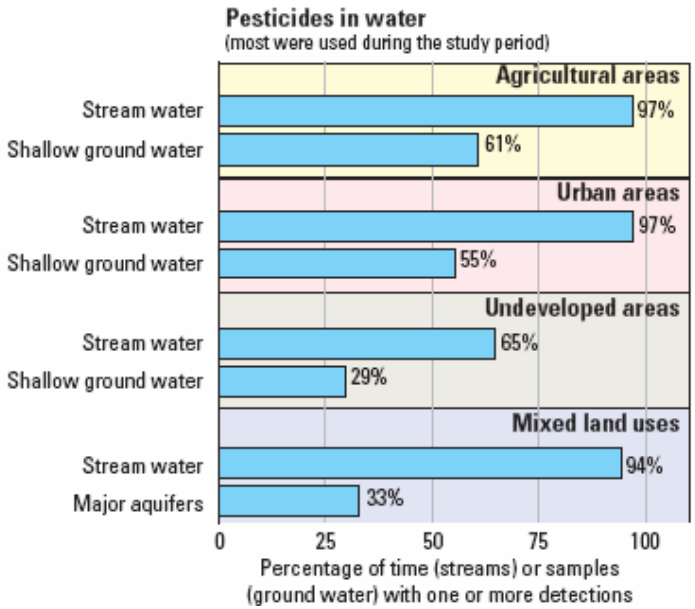
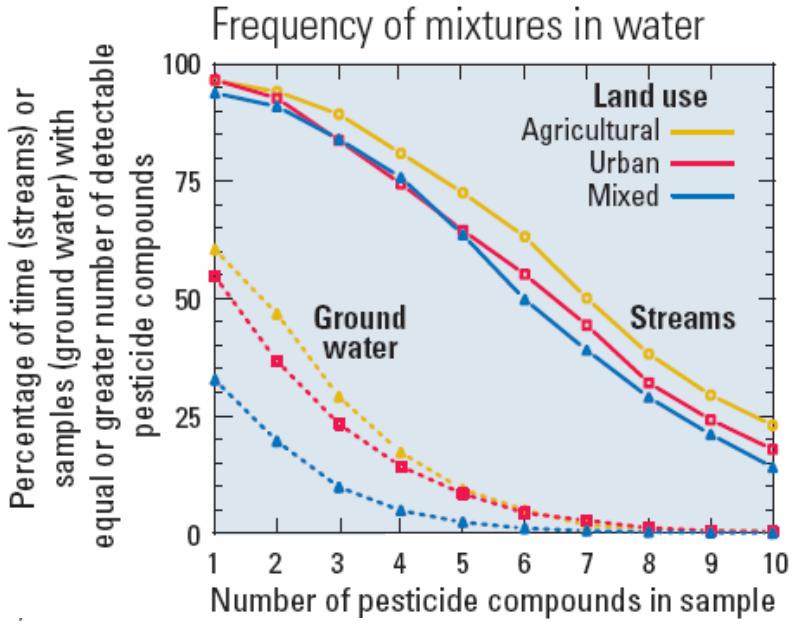
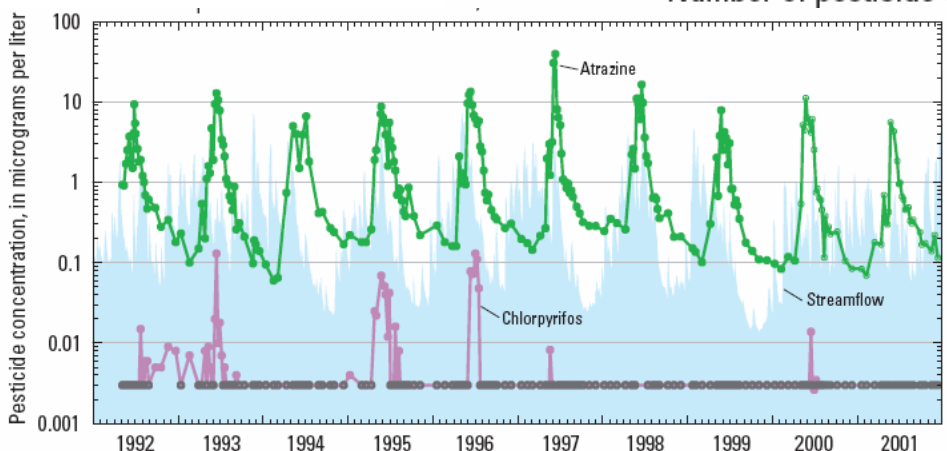
National data from NAWQA provides a valuable context for other studies.







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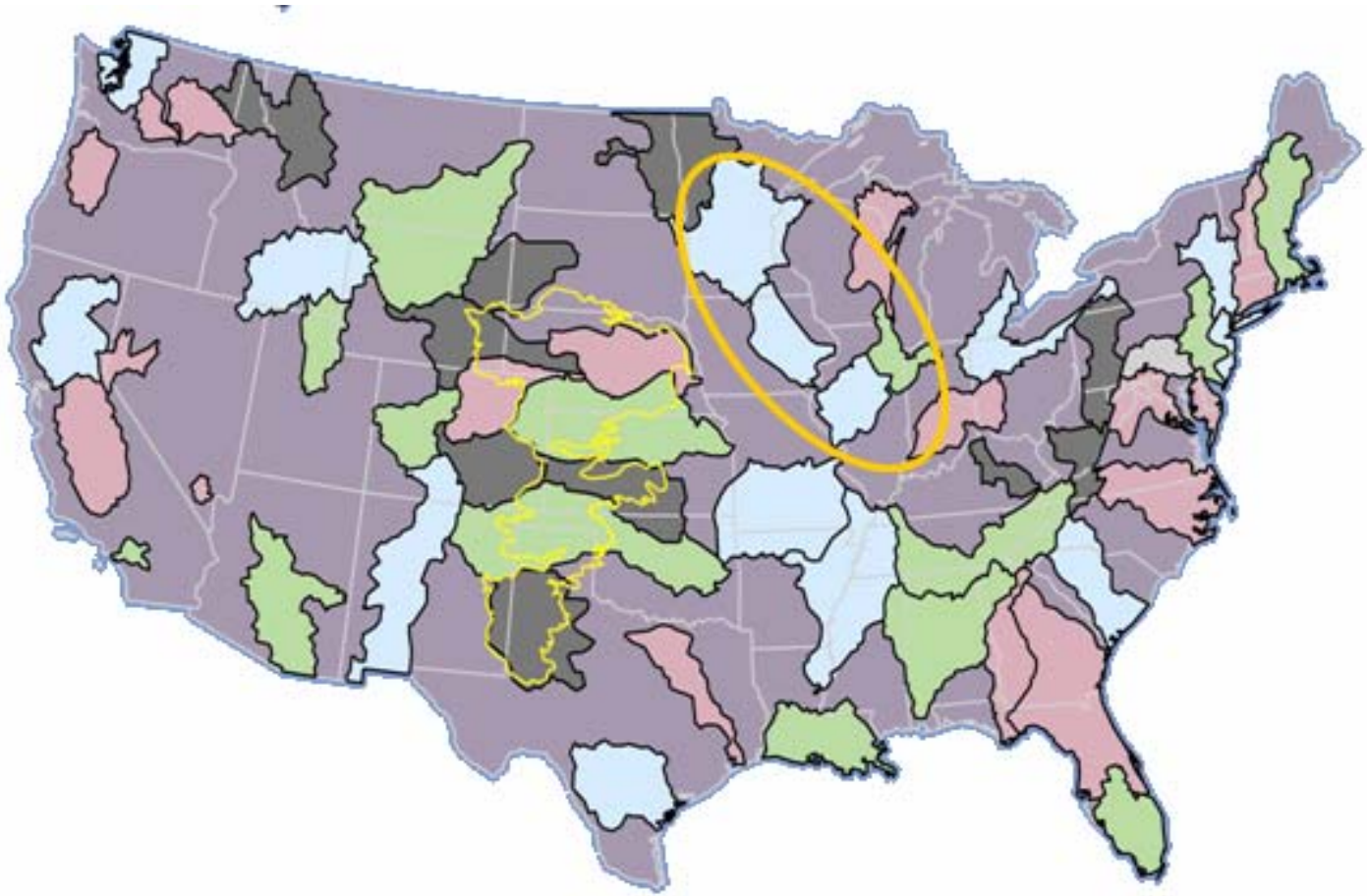
NAWQA studies are able to work together to address regional questions.



Overview of the U.S Geological Survey

And, here's Mike!

Janice Ward – Office of Water Quality

Jeff Stoner -- Minnesota

Steve Kalkhoff -- Iowa