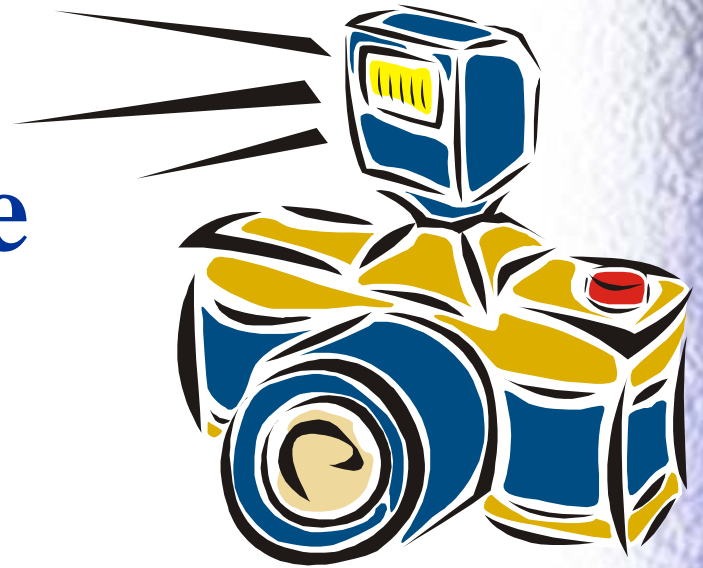


IOWATER Snapshots Provide Picture of Water Quality Statewide



**Lynette Seigley
Iowa Department of Natural Resources
Iowa Geological Survey**



*Photo by Clay Smith
Iowa DNR*

- **Established in 1998.**
- **Resides within the Iowa Water Monitoring Program.**
- **Mission: To protect and improve Iowa's water quality by establishing and supporting a statewide volunteer water monitoring program.**
- **On-site Trainings; Testing Equipment; Levels of Monitoring; Quarterly Newsletter; Online Database.**
- **Chemical, Physical, Biological, Habitat Assessments.**



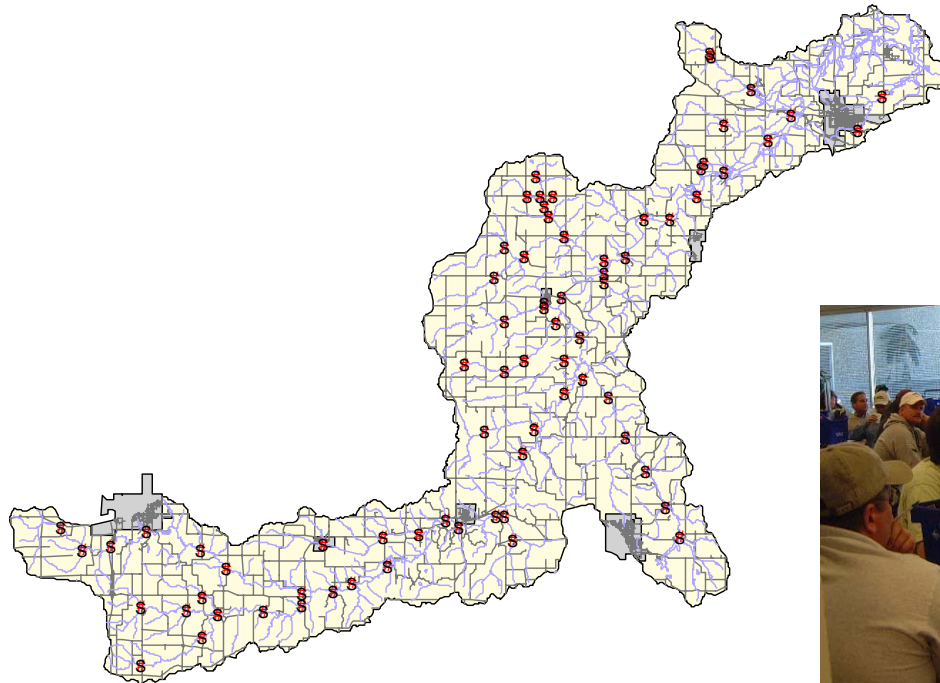
*Photo by Jacklyn Neely
Iowa DNR*



*Photo by Jacklyn Neely
Iowa DNR*

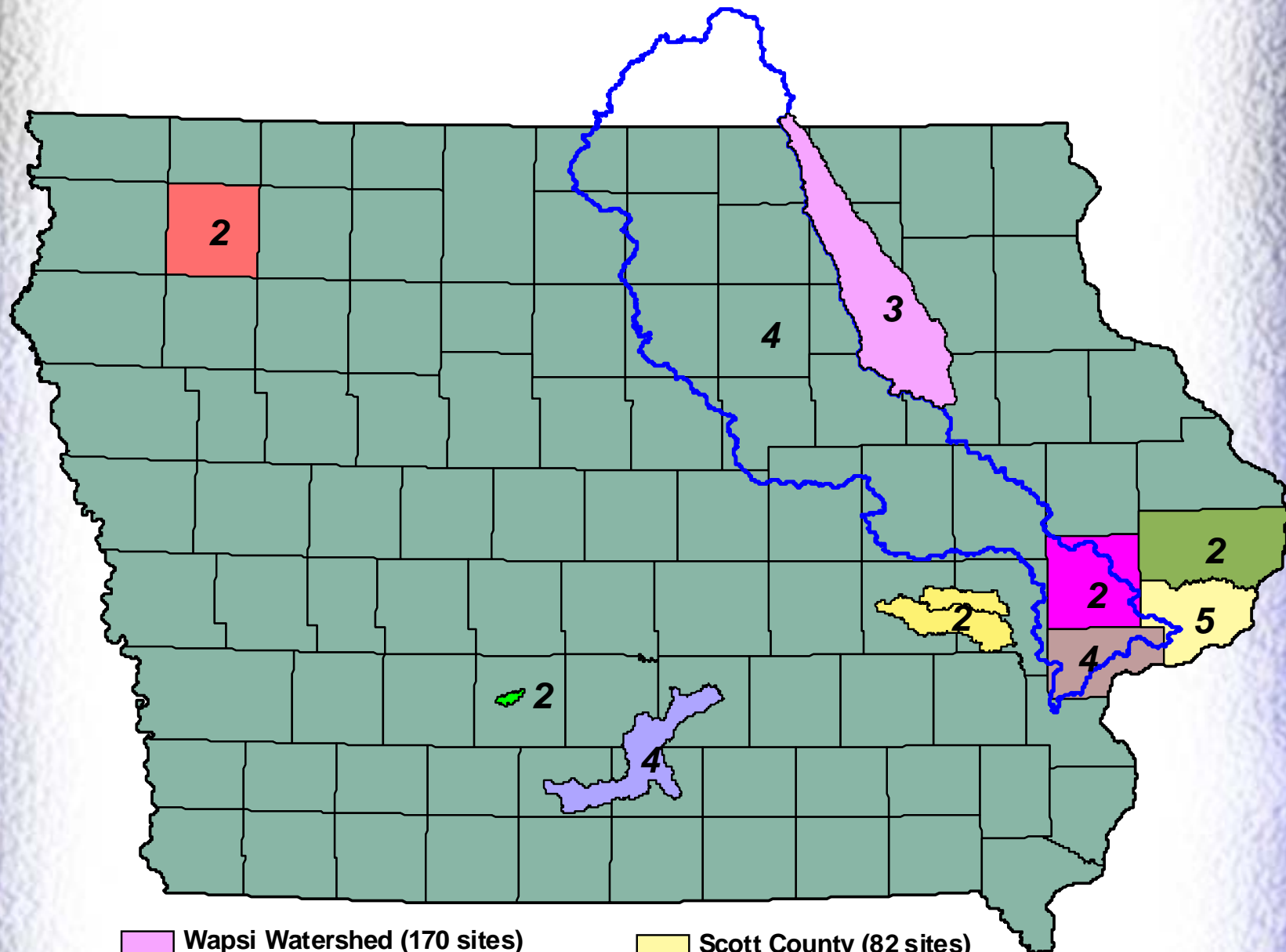
What is a Snapshot Sampling?

- Multiple sites throughout a geographic area (county or watershed) are sampled within a short period of time (e.g., three hours).
- Enlistment of volunteers is crucial.
- Reasons for conducting snapshots vary.
- Generally initiated by IOWATER monitors.



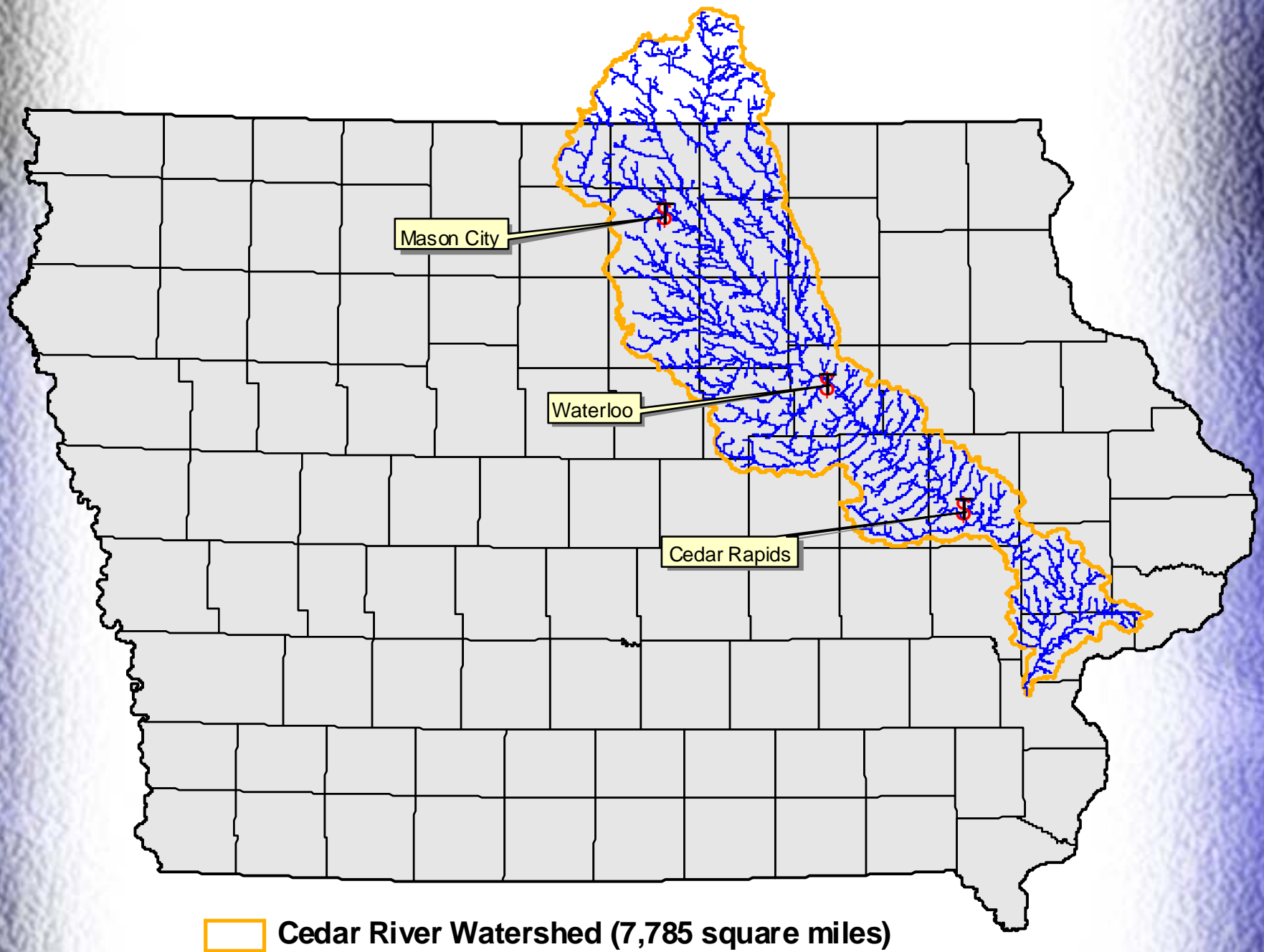
Why Snapshot Samplings?

- Educational tool that can increase public awareness/ involve local community.
- Collect baseline data for a geographic area.
- Identify “hot spots” and areas for further monitoring; target BMPs.
- Variety of testing methods & types of parameters.
- Conduct during different times of the year or different flow conditions.
- Credibility and quality of data enhanced when IOWATER trained volunteers participate.
- Snapshots have been collaborative efforts.
- By June 2004, 34 snapshots will have been conducted, including 4 statewide snapshots.

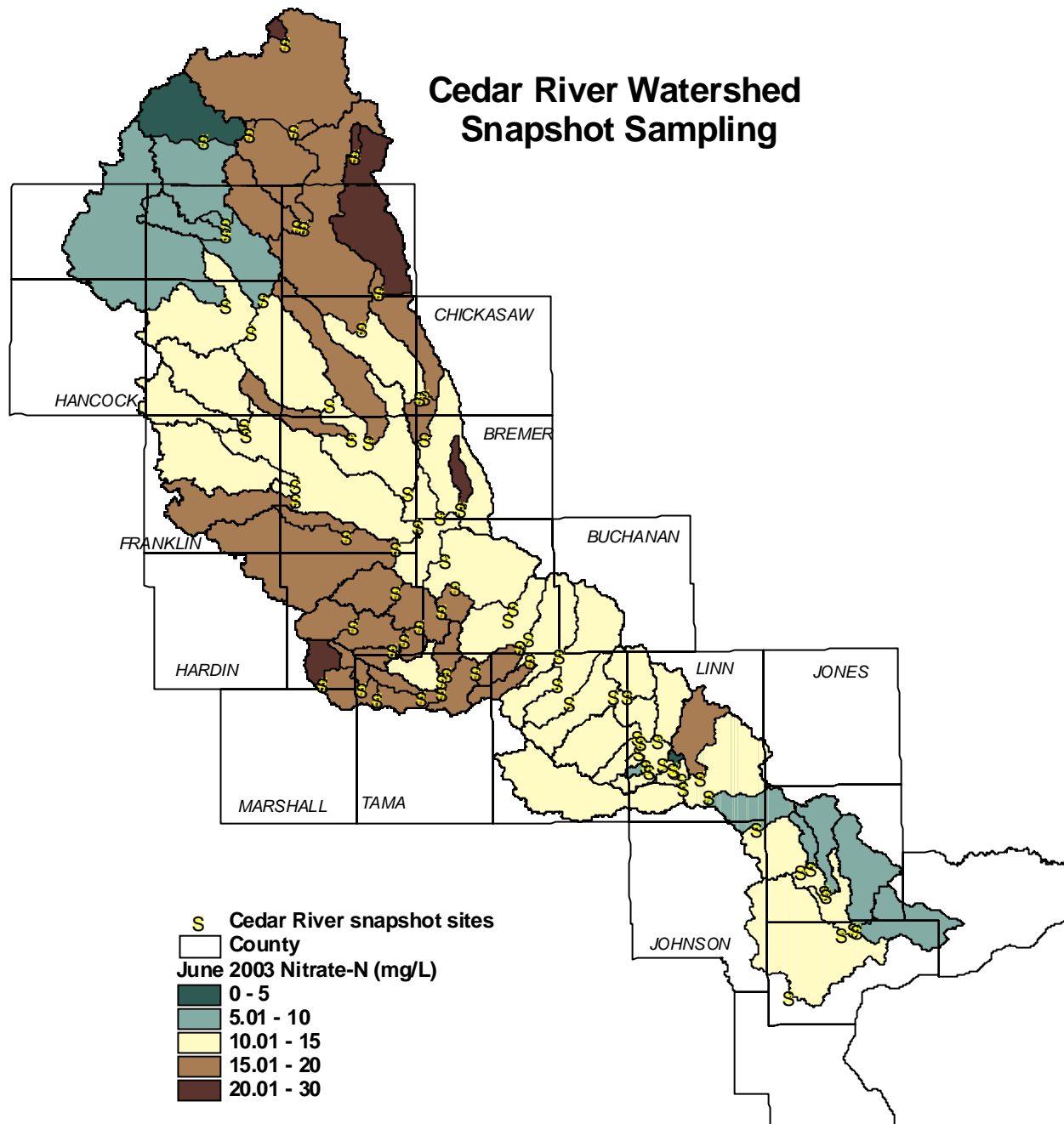


Wapsi Watershed (170 sites)
 Cedar River Watershed (78 sites)
 Old Mans/Clear Creek (67 sites)
 Cedar Lake Watershed (16 sites)
 Whitebreast Watershed (74 sites)

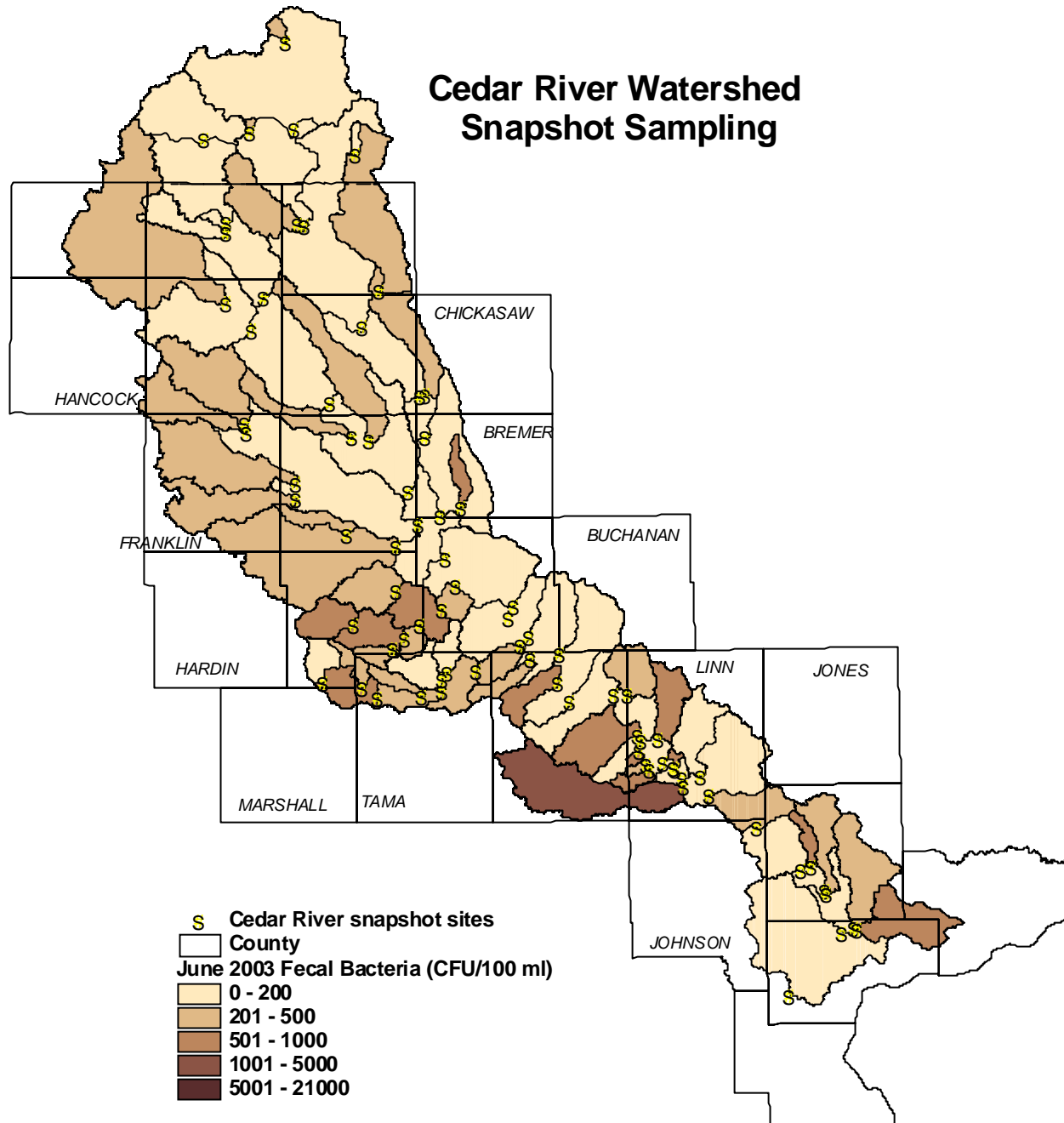
Scott County (82 sites)
 Muscatine County (52 sites)
 Clinton County (37 sites)
 Cedar County (36 sites)
 O'Brien County (100 sites)



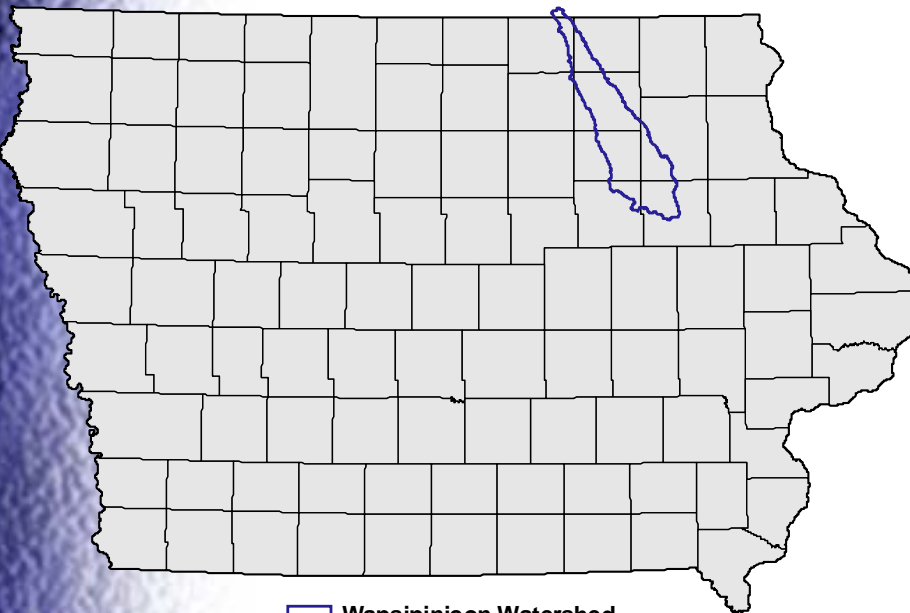
Cedar River Watershed Snapshot Sampling



Cedar River Watershed Snapshot Sampling

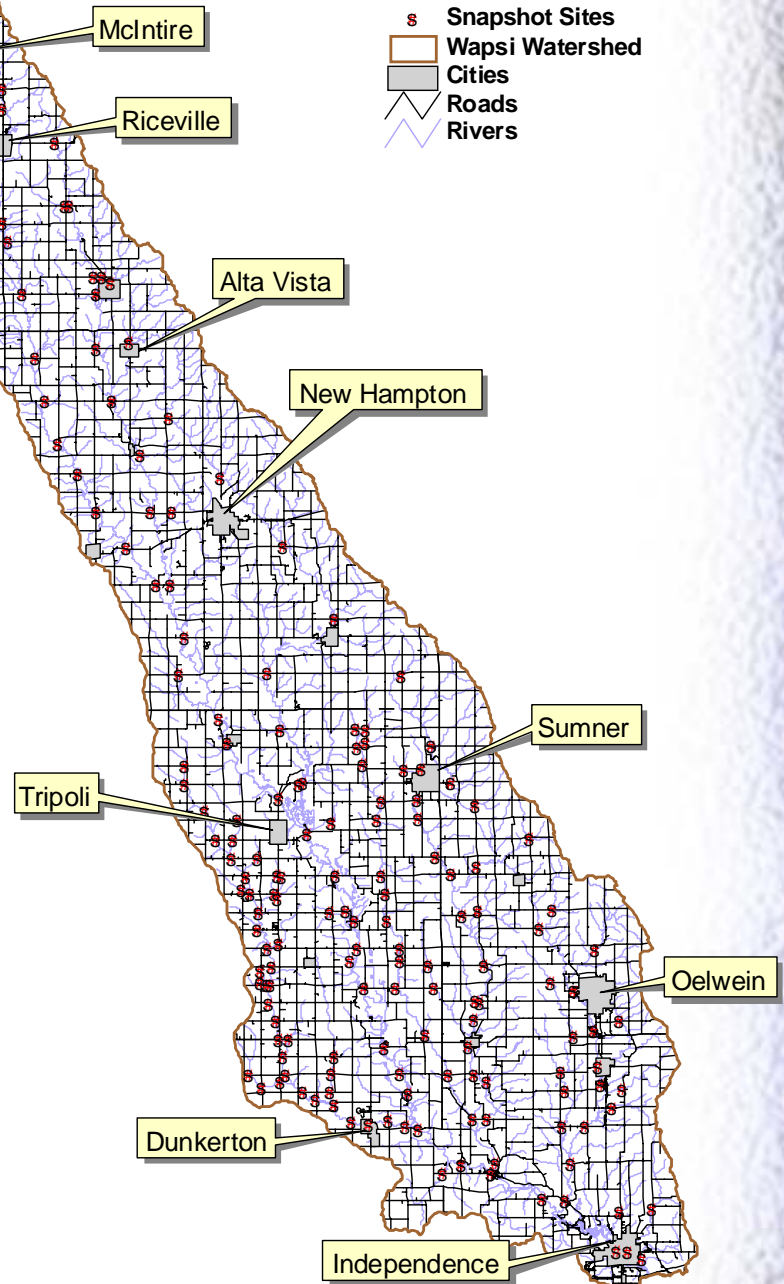


Wapsipinicon Watershed (920 square miles)

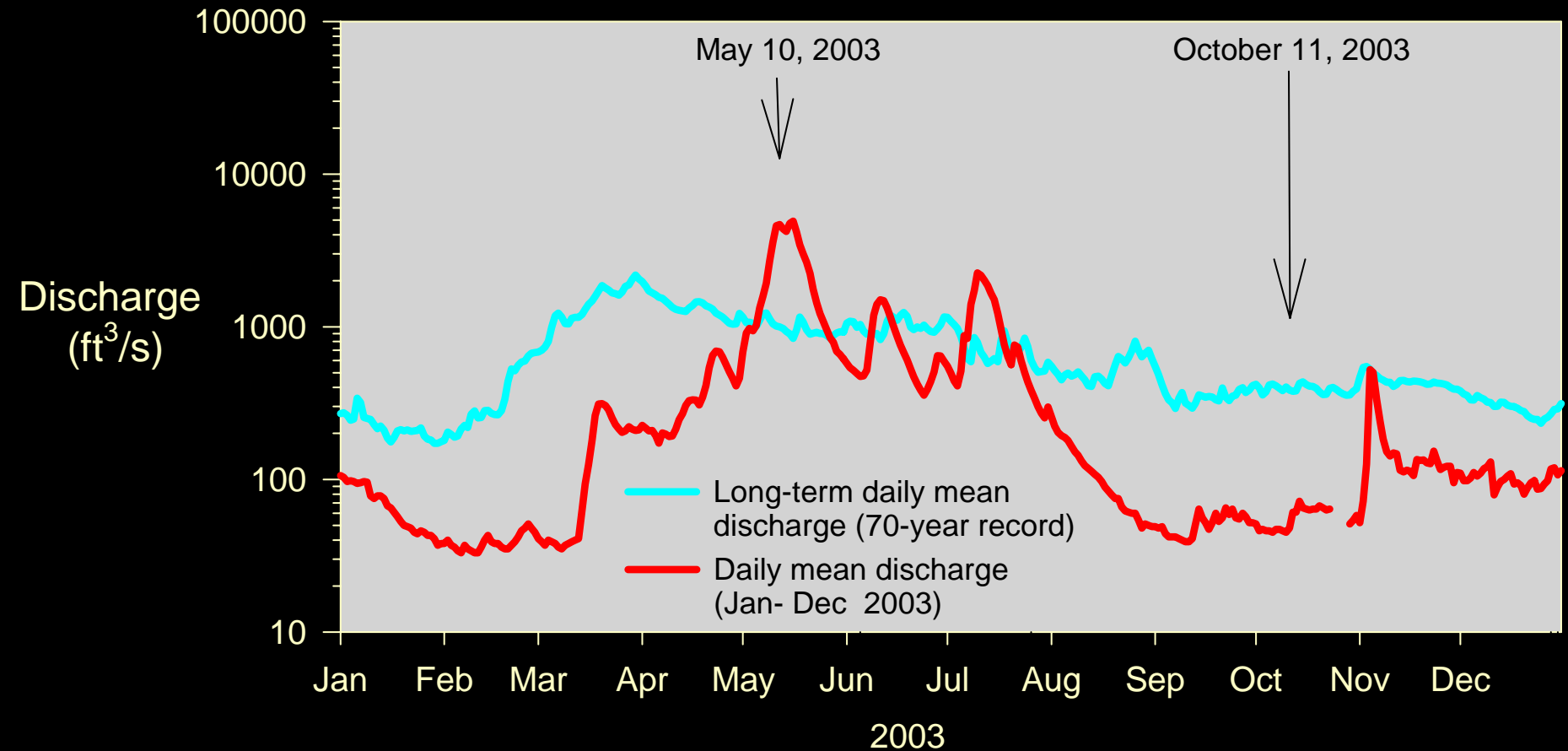


Wapsipinicon Watershed

- Snapshot Sites
- Wapsi Watershed
- Cities
- Roads
- Rivers

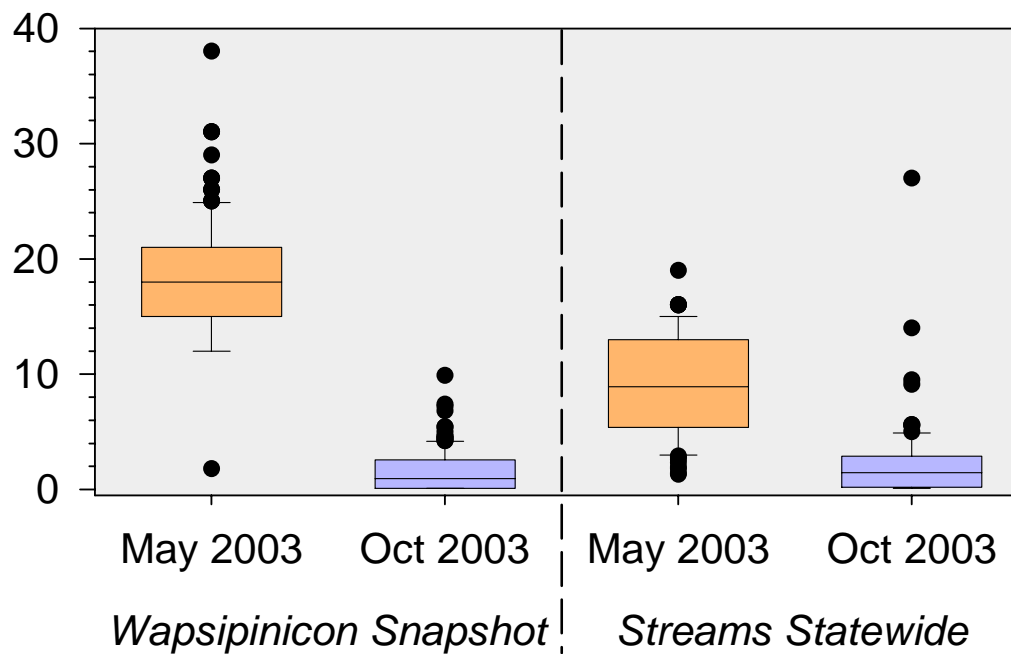


Wapsipinicon River near Independence

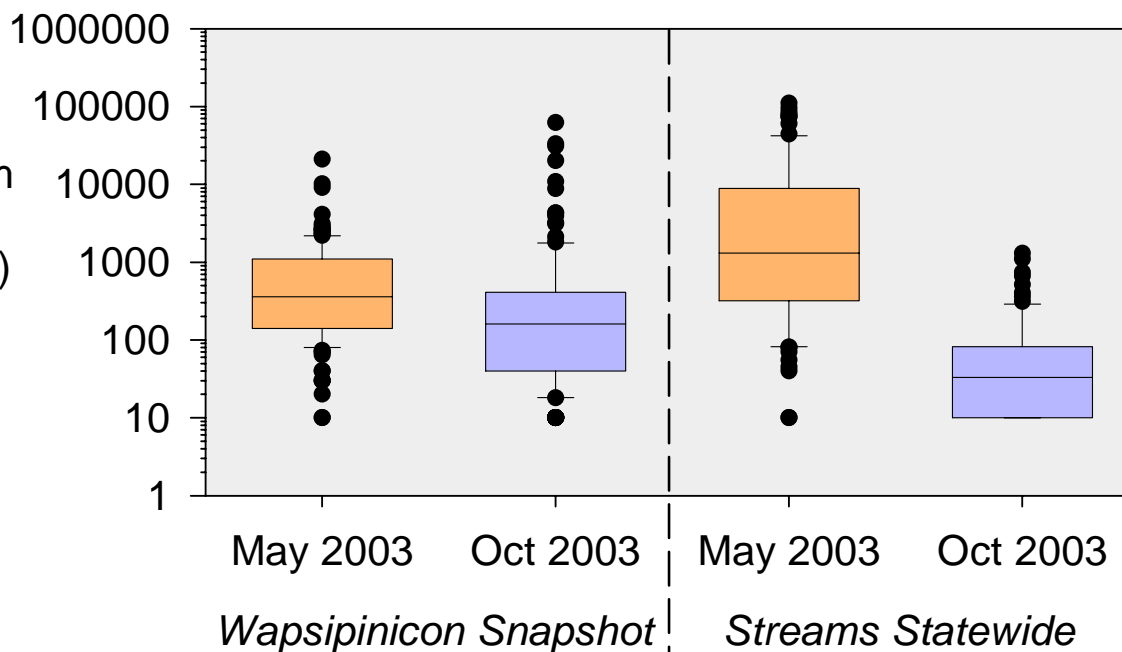


Source: <http://ia.usgs.gov> (U.S. Geological Survey, Iowa District)

Nitrate+
Nitrite-N
(mg/L)



Fecal Coliform
Bacteria
(CFU/100 ml)

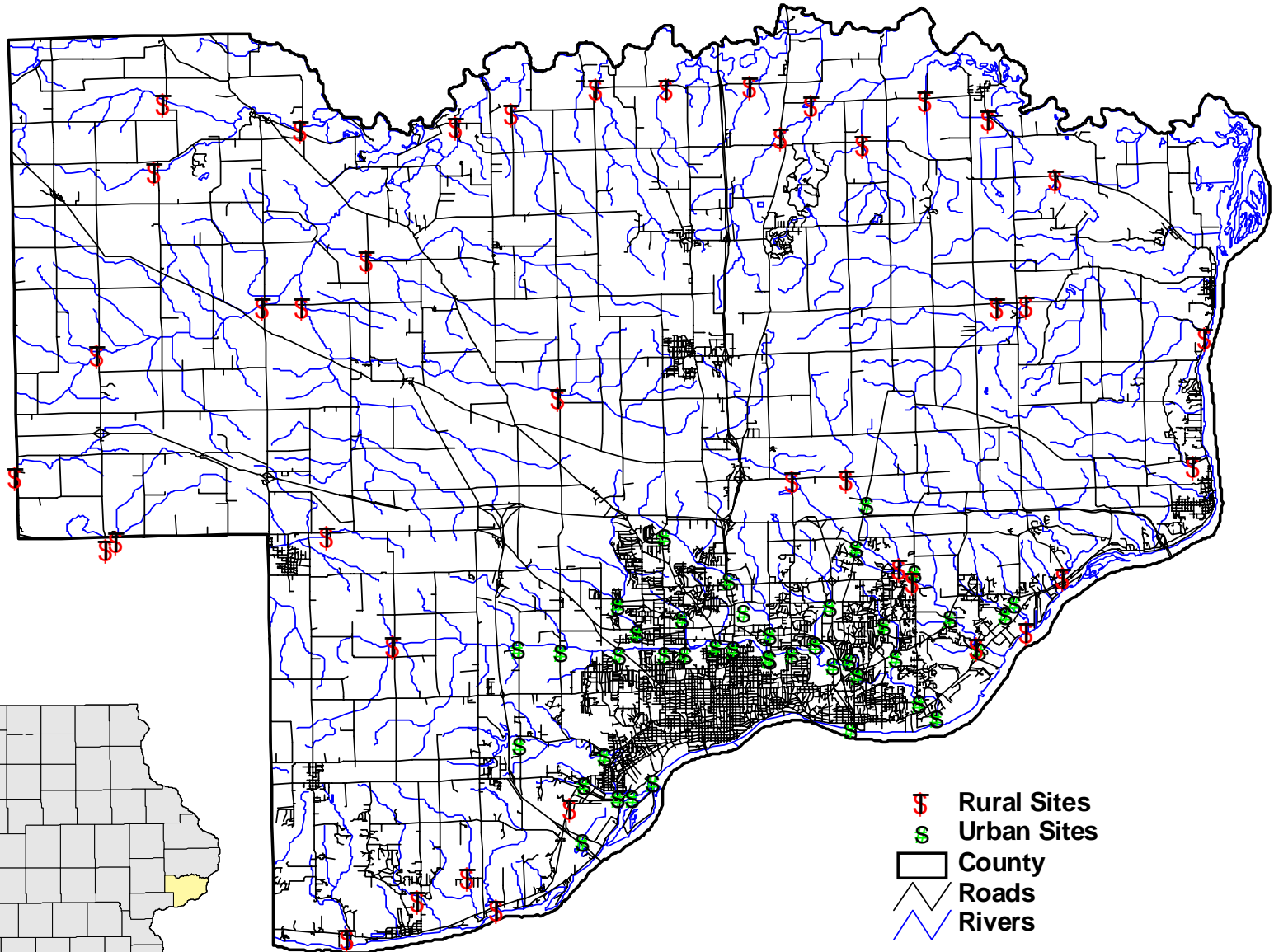


Storm Water Phase II BMPs

(Best Management Practices)

- *Public Education & Outreach on Storm Water Impacts*
- *Public Involvement / Participation (volunteer monitoring)*
- **Illicit Discharge Detection & Elimination**
- **Construction Site Storm Water Runoff Control**
- **Post-Construction Storm-Water Management in New Development & Redevelopment**
- **Pollution Prevention / Good Housekeeping for Municipal Operators**

Scott County Snapshot Sampling Sites





October 18, 2002

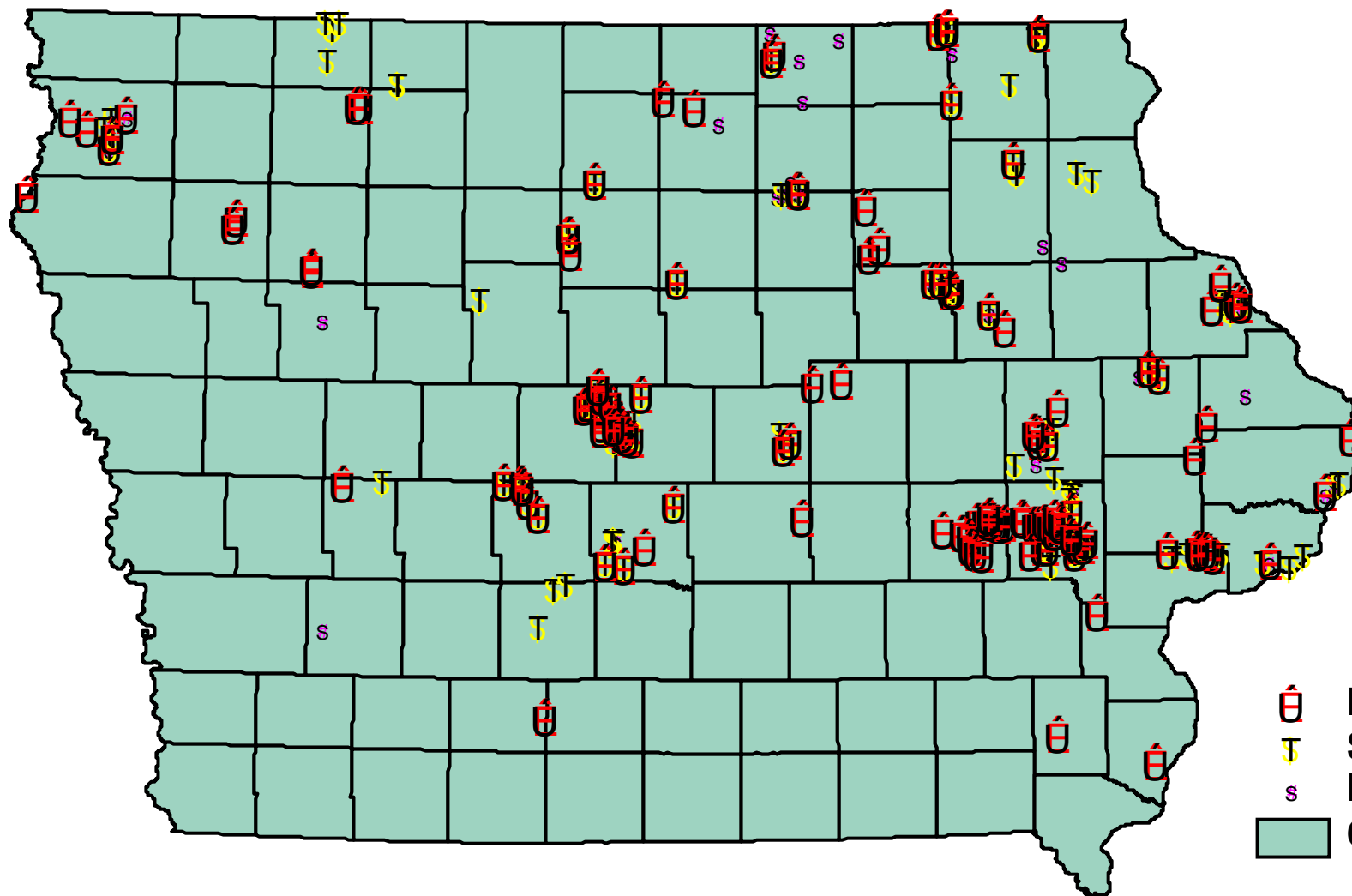
October 18, 2003





- **IOWATER Statewide Snapshots**
 - Provide a statewide picture of water quality.
 - Way of re-energizing IOWATER monitors.
 - Oct. 18, 2002; May 24, 2003; Oct. 18, 2003; May 15, 2004
 - Results provided to participants.





IOWATER Statewide Snapshots



-  Fall 2003
-  Spring 2003
-  Fall 2002
-  County

Benefits of Snapshots

- Engages local residents in monitoring in their backyard.
- Provides an educational experience for those unfamiliar with water monitoring.
- Identifies areas for additional monitoring.
- Collects data on a scale that could not be done otherwise.
- Monitoring begins to provide an answer to the question, “What is the quality of water?”

