Disinfectant Byproducts

- Excess nutrients in surface water can foster eutrophication and algal growth leading to the formation of disinfectant byproducts when the water is disinfected with chlorine.
- Numerous public water supplies in the IRW produce water with elevated levels of disinfectant byproducts, including trihalomethanes.

Blue Green Algae

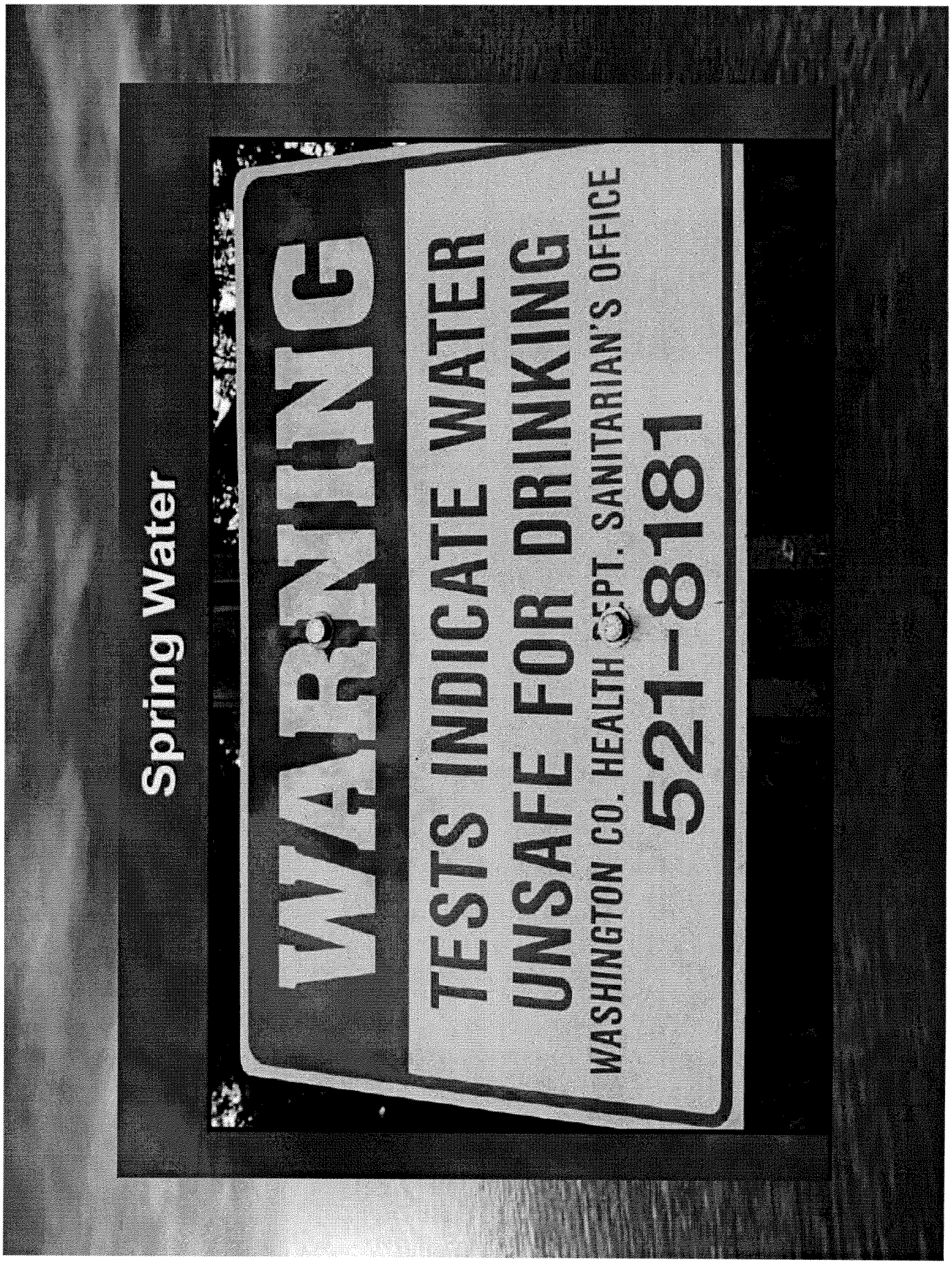
- U.S. Army Corps of Engineers' phytoplankton sampling has indicated the presence of Blue Green Algae in Lake Tenkiller.
- Blue Green Algae blooms are caused by long-term build-up of nutrients, primarily phosphorus, in a waterbody.
- Blue Green Algae can produce endotoxins (allergic reactions), hepatotoxins (damage to the liver and other internal organs), and neurotoxins (damage to the Central Nervous System and the brain).

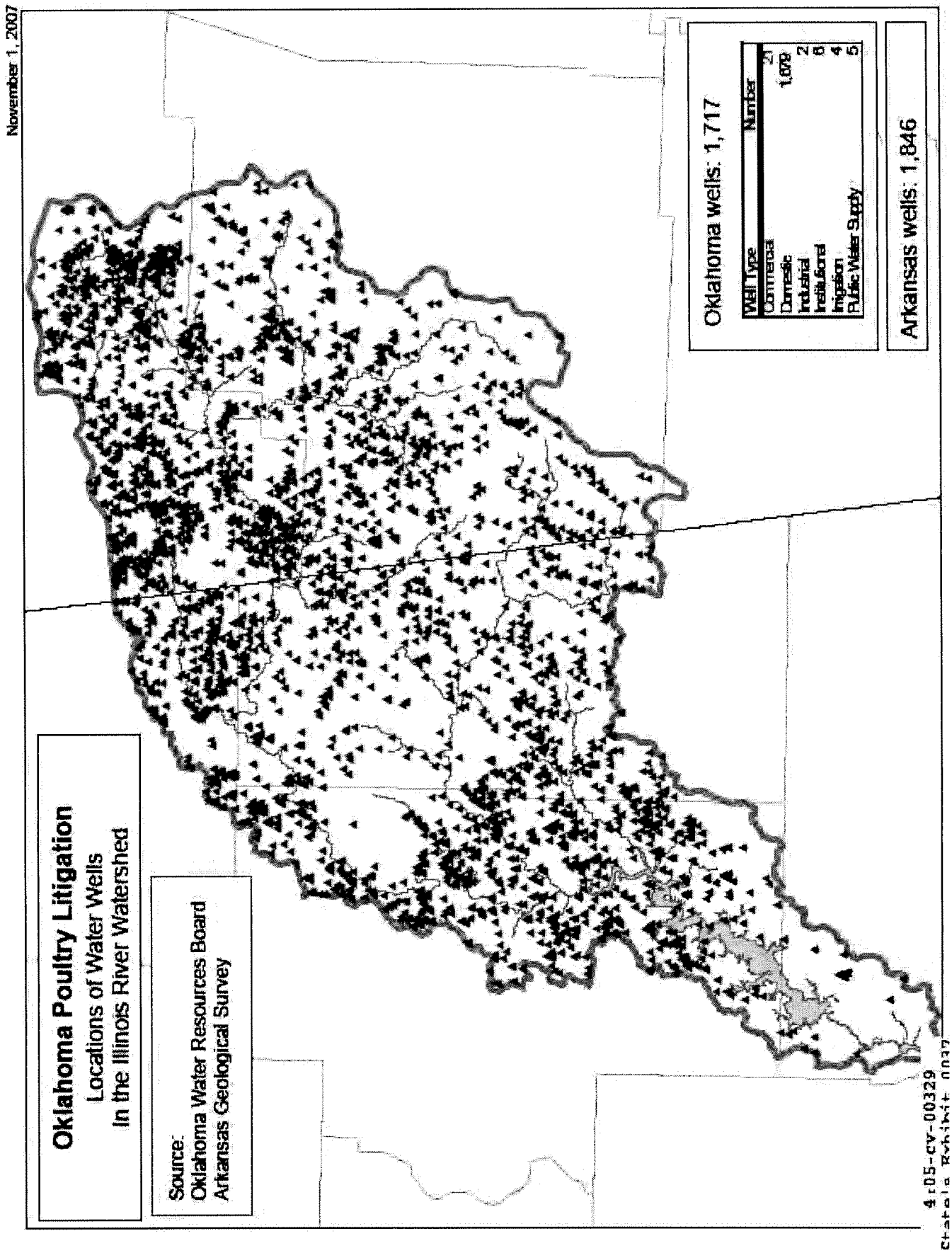
Bacteria

- Monitoring data show frequent exceedences of Primary Body Contact Recreation Standards in the IRW for fecal bacteria, enterococcus and E. Coli.
- According to the 2004 Integrated Water Quality Report, all three scenic rivers in the IRW are reported as not supporting their Primary Body Contact Recreation Beneficial Use due to bacteria levels.

Table 1. **Permanent Ambient Trend Monitoring Stations and their Beneficial Use Support Status.**

STATION NAME	FWP	PBCR	PPWS	AG	AES
Barren Fork, SH 51, Eldon	S	NS (6,7,8)	NS	S	NS (14)
Flint Creek, US 412, Flint	S	NS (6,7,8)	NS (15)	S	NS (14)
Illinois River, US 59, Watts	NS (5)	NS (6,7,8)	NS	S	NS (14)
Illinois River, US 62, Tahlequah	NS (5)	NS (6,7,8)	NS	S	NS (14)
Lee Creek, SH 101, Short	S	NS (8)	S	S	S
Mountain Fork, SH 4, Smithville	NS (2, 3, 4, 5)	S	S	S	NS (14)


Spring Water
WARNING
TESTS INDICATE WATER
UNSAFE FOR DRINKING
WASHINGTON CO. HEALTH DEPT. SANITARIAN'S OFFICE
521-8181


November 1, 2007
Oklahoma Poultry Litigation
Locations of Water Wells
In the Illinois River Watershed
Source:
Oklahoma Water Resources Board
Arkansas Geological Survey
Oklahoma wells: 1,717
Well Type
Number
Commercial 21
Domestic 1,678
Industrial 2
Institutional 8
Irrigation 4
Public Water Supply 5
Arkansas wells: 1,846

Oklahoma Litigation

- After many years of negotiations, the State of Oklahoma filed suit against fourteen poultry companies for pollution of the IRW.
- Complaint filed June 13, 2005 in Federal Court (Northern District of Oklahoma, Case No. 4:05-cv-329)
- Complaint alleges that Defendants waste storage and disposal practices have caused pollution of the land, biota, water and sediments of the IRW.
- Complaint seeks, among other things, abatement, costs, remediation, and damages.
- Three classes of claims:
  - Federal Statutory Claims (including CERCLA Cost Recovery, CERCLA NRDs, RCRA citizen suit)
  - Common Law Claims (including Nuisance, Trespass, and Unjust Enrichment)
  - State Statutory Claims (including violations of the Oklahoma Environmental Quality Code, CAFO Act, and Poultry Feeding Operations Act)