<u>Presentation Outline:</u> <u>Arkansas Water: New Challenges -- New Solutions</u> C.H. Vines Conference Center, Ferndale, Arkansas November 19, 2004

ARKANSAS WATER RIGHTS: AN UPDATE ON CURRENT CONFLICTS:

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I. Introduction – Arkansas Water Resources Overview²

- Average Annual Rainfall: 50 in. (40-58)
- Average Daily River Flow: 280 billion gal.
- Firm Yield Federal Reservoirs: 557 mgd
- Total Daily Water Use (2001): 10.1 billion gal.
- Daily Groundwater Use: 7.4 billion gal. (73%)
- Registered Wells (2002): 51,000 (98.6% are agricultural wells)
- 86% Groundwater Use is Irrigation (96% in Eastern Arkansas)

II. Common Law Water Rights

- A. Riparian Rights / Reasonable Use Rule Surface Water
 - Harris v. Brooks, 225 Ark. 436, 283 S.W.2d 129 (1955).
- B. Nonriparian Use of Surface Water

- Harrell v. City of Conway, 224 Ark. 100, 271 S.W.2d924 (1954).

C. Riparian Rights / Reasonable Use – Groundwater

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² Data obtained from: ARK. SOIL & WATER CONSERVATION COMM'N ("ASWCC"), Arkansas Groundwater Protection and Management Report for 2003 (2004); ASWCC, Arkansas Water Plan: Executive Summary 5-7 (1990).

- Jones v. Oz-Ark-Val Poultry, 228 Ark. 76, 306 S.W.2d 111 (1957).

D. Nonriparian Use of Groundwater

- Lingo v. City of Jacksonville, 258 Ark. 63, 522 S.W.2d 403 (1975).

III. Statutes and Regulations Affecting Water Rights: Ark. Code Ann. Title 15, Ch. 22

- A. Subchapter 2: Allocation and Use Generally
- B. Subchapter 3: Determination of Water Use Requirements
- C. Subchapter 5: Water Development Projects Generally
- D. Subchapter 6: Arkansas Water Resources Development Act of 1981
- E. Subchapter 8: Arkansas Water Resources Cost Share Finance Act
- F. Subchapter 9: Arkansas Groundwater Protection and Management Act
- G. Subchapter 12: Sparta Critical Groundwater Counties' Remediation Act
- H. ASWCC Regulations: Title III, Rules for the Utilization of Surface Water
- I. ASWCC Regulations: Title IV, Rules for the Protection and Management of Groundwater

IV. The Grand Prairie Area Demonstration Project: A Case Study of Water Rights Conflict and Conjunctive Use³

A. *Ark. Wildlife Fed'n v. U.S. Army Corps of Engineers, et al,* No. 4-04-CV-133, U.S. Dist. (E.D. Ark., Sep. 9, 2004) (granting defendants' motion for summary judgment).

B. *Ark. Wildlife Fed'n v. Ark. Soil & Water Conservation Comm'n, et al*, No. CV04-1726, Circuit Court of Pulaski County, Arkansas (summary judgment motion pending).

V. The Middle Fork of the Saline River: Minimum Flow, Water Quality, Real Estate Development, and a Finite Resource

A. Water use development by Hot Springs Village; conflicts with lower riparian owners and citizen groups.⁴

B. U.S. Geological Survey Water Quality Assessment study (2003).⁵

³ See References Appendix for selected publications related to the Grand Prairie Area Demonstration Project.

⁴ See David Koon, *Hurlon Ray's last battle; Who'll get the water of the Middle Fork of the Saline River?* ARKANSAS TIMES, August 2002.

VI. Other Water Rights Conflicts in the Making

- A. Jefferson County (Pine Bluff area) Sparta Aquifer depletion.
- B. Irrigation Districts.
- C. Minimum Stream Flows generally.
- D. Allocation Plans for major river courses; White River, Ouachita River.
- E. Nonriparian Transfers generally just waiting on a bad drought.
- F. Aquifer depletion lawsuits.

REFERENCES APPENDIX

1. ARK. SOIL & WATER CONSERVATION COMM'N, Arkansas Groundwater Protection and Management Report for 2003 (2004).

2. ARK. SOIL & WATER CONSERVATION COMM'N, Arkansas Water Plan: Executive Summary 5-7 (1990).

6. WILLIAM W. LAYHER, Determination of Instream Flow Recommendations for the Middle Fork Saline River Using Proportional Analysis Methodology, Contract No. 0021133 (April 11, 2001).

4. PAUL W. MCKEE AND BRIAN R. CLARK, Development and Calibration of a Groundwater Flow Model for the Sparta Aquifer of Southeastern Arkansas and North-Central Louisiana and Simulated Response to Withdrawals, 1998-2027, U.S. GEOLOGICAL SURVEY WATER RESOURCES INVESTIGATIONS REPORT 03-4132 (2003).

5. T. B. REED, Recalibration of a Groundwater Flow Model of the Mississippi River Valley Alluvial Aquifer of Northeastern Arkansas, 1918-1998, With Simulations of Water Levels Caused by Projected Groundwater Withdrawals Through 2049, U.S. GEOLOGICAL SURVEY WATER RESOURCES INVESTIGATIONS REPORT 03-4109 (2003).

⁵ U.S. GEOLOGICAL SURVEY, Project Proposal: Water-Quality Assessment of the Middle Fork of the Saline River, Central Arkansas (June 23, 2003). This study was initiated in 2003 and is entering the second year of a 4-year project.

7. U.S. ARMY CORPS OF ENGINEERS, Grand Prairie Area Demonstration Project website: <u>http://www.mvm.usace.army.mil/grandprairie/</u> (access to extensive reports, maps, and related project information).

3. U.S. GEOLOGICAL SURVEY, Project Proposal: Water-Quality Assessment of the Middle Fork of the Saline River, Central Arkansas (June 23, 2003).