

# **Arkansas Louisiana 10th Anniversary Sparta Meeting**

**11:30 a.m. – 3:30 p.m.**

**October 25, 2007**

**El Dorado Chemical & Ouachita River Infrastructure  
El Dorado (Union County), Arkansas**

## **First Arkansas-Louisiana Sparta meeting, Ruston, February 1997**

Ten years ago, Arkansas and Louisiana citizens met in Ruston to discuss remedies for declines in Sparta wells that had occurred from decades of overuse. By well-defined criteria, a critical point had been reached in both states.

## **Luncheon-Tour Sponsored by Union County Water Conservation Board, October, 2007**

Since that first bi-state meeting, Union County, Arkansas has implemented a ground-to-surface water conversion project so successful that, for the first time in decades, water levels are rising in the county's Sparta wells (in Claiborne Parish's Junction City area wells, too). The Union County Water Conservation Board (UCWCB) invited the Sparta Commission and others to a luncheon on Oct. 25 hosted by and at El Dorado Chemical, followed by a tour of Union County's Ouachita River alternative water (surface) supply infrastructure. The purpose was to demonstrate aspects that Louisiana might adopt in order to progress from studies and a pilot project toward successful operations.

## **Ingredients of Union County's Successful Sparta Conservation Program**

Among factors that made the Union County project possible and successful are the following:

1. State got Union County's attention: Union was among the first five Arkansas counties declared by the Arkansas Natural Resources Commission (ANRC)\* a Critical Groundwater Area in 1996; both ANRC and USGS agreed, Union County's situation was the most critical.
2. A motivating shock: USGS special report, solicited by Union County with strong support from federal elected officials, told Union County it must cut its aquifer water use by 72% or risk inflicting irreparable damage on the aquifer.
3. State legislation: Act 1050 of 1999 established effective local authority (Critical Groundwater County Conservation Boards) with well-defined state assistance and oversight (ANRC)
  - county leadership held many public meetings (County residents/leadership/organizations)
  - ALL Sparta stakeholders contributed to, supported, and, generally, wrote the legislation
  - ANRC receives local applications and approves appropriate local-sought county boards that have plans to meet a defined shortage
  - law specifies composition of a board, whose members receive no compensation
  - some board powers: contract, set fees, regulate, accept grants, monitor wells, generate funds, investigate
  - law requires reporting of water use and sets penalties for non-compliance
4. A clearly defined mission: Within a month after it first met (6/24/1999), the Union County Water Conservation Board adopted the following mission statement: 'The guiding purpose and primary objective of the Union County Water Conservation Board is to conserve,

protect, and maintain the Sparta Formation Aquifer as a continuing source of high quality, potable water for current and future consumers by providing for affordable, alternate sources of fresh water pursuant to the authority and responsibility granted by the State of Arkansas.’

5. An empowered board of stakeholders (first appointed, now elected) who carry out the mission.

6. Paid professionals to assure effective program components: credibility, cooperation, on-going education, efficient administration.

7. An opportunity – Union Power Station built a river water treatment facility with capacity to meet both its and Union County’s current/future needs; other local industries tie in; Union County paid 27% of cost and Union County now owns and operates the infrastructure.

8. Public buy-in: 1) *24¢ per 1000 gallons of Sparta water pumped* – as provided for by Act 1050 and adopted by the Board, 1999.

2) *7-year 1¢ sales tax for a pipeline (cancelled after 4 years, when debt was paid off)*.

9. Industry buy-in - Industries paid for on-site infrastructure to convert to surface water, and they now pay 56 cents per thousand gallons of river water used. As expressed by one industry spokesman: “We’re a part of the solution – we have to be if we’re to have a community to live in. It made sense to do this and the three big industries recognized it was the right thing to do.”

## **OUACHITA RIVER ALTERNATIVE WATER SUPPLY PROJECT**

### **Pre-project History**

Providers of more than 1000 jobs, Great Lakes/Chemtura Central Plant and Lion Oil, in 1999, reduced Sparta consumption by 10%, or 2.3 million gallons a day (mgd), by completing a water pipeline between their plants, so that Chemtura’s once-used cooling tower water could be used later for Lion Oil’s refining process.

In August 1997, the El Dorado Water Utilities began using reclaimed (recycled) water to irrigate the city’s two golf courses; savings 1 mgd. Because of extensive public information/education and public awareness, the public began to conserve water in private homes.

### **Project Description**

**Phase I**– Union Power Station built a Ouachita River intake and clarification facility, oversized to meet both the power plant’s and Union County’s current and future needs, and five miles of pipeline from the river to its site. The Power Station deeded the \$52 million infrastructure over to Union County for incremental cost of oversizing. Union County cost: \$14 million; Union Power cost: \$38 million. Phase I was fully operational by early 2003.

**Phase II**– Union County Water Conservation Board built a pump station and storage tank 9 miles from the river and more than 15 miles of pipeline to supply three industries that would convert from ground to surface water. Phase II was completed in September, 2004.

**Conversion from Sparta to Ouachita River water** (industries invested more than \$1.8 million in on-site infrastructure)

In Dec. 2004, Lion Oil Co. totally converted from aquifer use. In Feb. 2005, El Dorado Chemical totally converted. In Dec. 2005, Great Lakes/Chemtura converted 1 mgd.

## PROJECT COSTS AND SPARTA SAVINGS

**Estimated Total Cost for the ground-to-surface water conversion: \$65 million**

**Estimated Sparta Savings: More than 6 mgd. The project has 10 mgd excess capacity and is expandable to provide an additional 19 mgd.**

### FUNDING PARTNERS

#### Local – 90%

**Union Power Partners (Entegra)** – Phase I infrastructure (intake, clarification, pipeline from river to Power Plant)– \$38 million;

**Chemical Companies** (*Great Lakes/Chemtura, El Dorado Chemical; Lion Oil Company*): combined investment for on-site infrastructure = \$1.8 million + ROW easements; in addition, El Dorado Chemical allowed UCWCB to connect for electrical service to flow meter – \$17,000 Savings

#### Consumers and Taxpayers

*Union County Taxpayers* – 1¢ County-Wide Sales Tax (4/2002-12/2005); \$23 million for county's share of Phase I intake, clarification, & pipeline and for Phase II infrastructure & pipeline to industries

*Sparta Aquifer Consumers* – 24¢/1000 gal. Conservation Fee – collections 1999-2007 = \$10.78 million

#### Others

Linda & Stan Sweeney – donated Sparta Study Well site 08/2004

Gladys & Clayton Taylor Grandchildren – donated land for a portion of the pipeline right-of-way

Charles E. Thomas – donated land for intake structure, clarification facility and connecting pipeline

El Dorado Educational Foundation – funded multiple public school water resource education projects

Union County Conservation District – ongoing professional time, data, education, and resources

Energy Environmental Stewardship Award – \$10,000 in 2003 and \$2,500 in 2007 – for education and conservation

#### Federal – 8%

**Economic Development Administration (EDA)**–\$1.48 million + 20,000 fee to SWPDD–60:40 Fed. Share/Local Match – Burns & McDonnell Contract #1 - Pump Station & Storage Tank–5/28/2004

**Environmental Protection Agency (EPA)** – \$1.94 million construction grant (\$60,000 fee ANRC): 55:45 Federal Share/Local Match – Contract #1 Pump Station and Storage Tank– funds rec'd in 12/2005 & 09/2007

**Housing & Urban Development (HUD)** – \$1.3875 million – Total Project Exempt/Soft Costs (non-construction)

**U.S. Army Corps of Engineers** – \$500,000 WRDA 219 funds – Bank Stabilization–completed 12/11/04

**U.S. Geological Survey (USGS)** – ongoing professional time, data, education, and resources

#### State – 2%

**Arkansas Natural Resources Commission (ANRC)** - professional time, data, education, resources

**Economic Development of Arkansas Fund Commission** (no longer exists) 2.5 million – Burns & McDonnell Engineering Services & Various Infrastructure – Funds rec'd 1999 & 2000

About This 10th Anniversary AR-LA Meeting & Information Summary: The document was prepared by Alice Stewart, Sparta Commission, 11/08/2007: [alice.stewart@att.net](mailto:alice.stewart@att.net) Content was drawn from material distributed at the Oct. 25 AR-LA Sparta Meeting, including 'Project Description, August 2004,' Edited Jan. 2006 and 'Funding Status Report #35, Oct. 25, 2007'.

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\*Arkansas Soil & Water Conservation Commission was renamed the Arkansas Natural Resources Commission in 2005.



