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# WATER

LITTLE ROCK MUNICIPAL WATER WORKS

# LEAK

April 1993

Volume 28 Number 4

## YOUR SPECIAL INVITATION

**WHO:** YOU AND FAMILY

**WHAT:** 1993 LITTLE ROCK MUNICIPAL WATER WORKS' COMPANY PICNIC

**WHEN:** 6 P.M. - 9:30 P.M. TUESDAY  
 11 MAY 1993

**WHERE:** MAUMELLE PARK, Pavilion #2



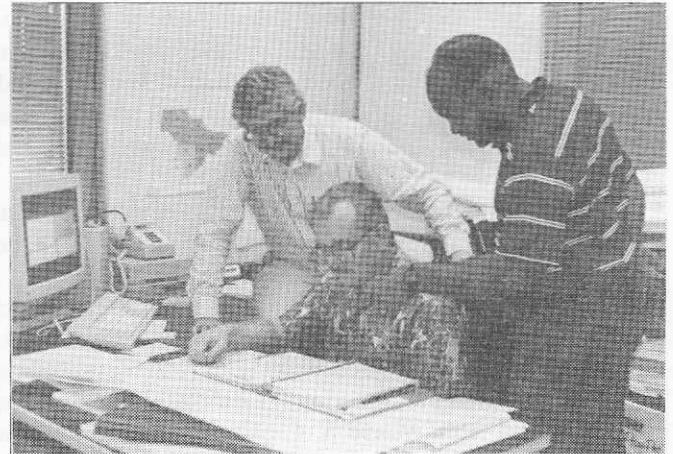
You and your immediate family are invited to attend the 1993 Annual Little Rock Municipal Water Works' Employees Picnic. The picnic will kick off at 6 p.m. Dinner will be served from 6:30 - 9:30 p.m. Games and entertainment will follow dinner.

**MENU:** Catfish filet, chicken filet strips, corn dogs, baked beans, coleslaw, hush puppies, French fries, peach and apple pie, soft drinks, lemonade, tea, and coffee.

**RECREATIONAL ACTIVITIES:** A skit by Patches the clown, bingo, horseshoes, volleyball, and softball (bring your equipment). Patches will entertain the children and the children will have access to the playground. Also, there will be balloons, a door prize, popcorn, and cotton candy.

**RESERVATIONS:** You need to make reservations by 3 May 1993. We need an advance count on employees and family members who plan to attend.

For more information, contact **Alane Taylor**, Purchasing Clerk, at Ext. 210.



**PAGIS** -- Dennis Yarbrow, Distribution Engineer, Gary Wittmuss, Pulaski Area Geographic Information System Coordinator, and Jos Bell, Engineering Assistant, compare written records to a report generated by computerized system.

## Degree of Accuracy on Miles and Miles of Pipe Surprising

by Dennis Yarbrow, Distribution Engineer

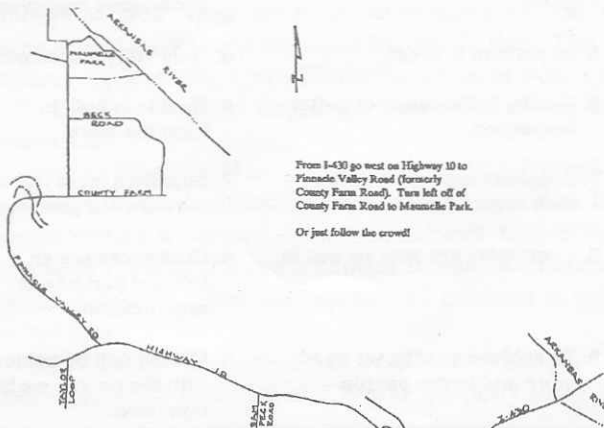
Since implementing our pilot Pulaski Area Geographic Information System in 1988, we have digitized into its data base many details on our distribution and production network and produced many useful planning products. A statistic that most water works systems track regularly is the miles of pipe within their systems. The Engineering Department recently compared the latest total manually computed from information in annual reports to the total generated by PAGIS. The results were surprising.

Here at Little Rock Municipal Water Works, our total of pipeline footage is calculated from a summation of pipe footage at the end of each year. The figure is compiled from information in job sheets, retirement

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# PAGIS

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reports, field reports, etc. Needless to say, this is an intensive manual compilation that has involved many employees over the years.

What has amazed me since I started work here more five years ago is how accurate some of the record keeping has turned out to be when checked against another method. An example is the tracking of how much distribution pipe we have in the ground. The record keeping on our pipeline is a process that has been developed and revised over the years and involved a number of employees, such as the late **Erma Winkler**, who retired in 1986; **Velma Simmons**, Engineering Administrative Assistant; **William McMahon**, Assistant Superintendent of Distribution; **Dale Russom**, Chief Engineer; **Howard Lenz**, Planning & Design Engineer; **Odetta Woods**, our former Management Secretary; and others. Each, at some point, played an important role in making sure an accurate count on the footage was maintained.

We recently have been transferring all information regarding water mains, valves, and fire hydrants from the "1 inch = 500 feet" roll maps and valve records to PAGIS.

The process we are using does not include going back to the as-builts for each project. We are just transferring relative locations of mains to the system. The information being digitized includes the side of the street on which the mains are located and where the valves and fire hydrants are (relative to each other and intersections). Because the scale at which this would normally be plotted is "1 inch = 500 feet," some details, such as fire hydrant and valve locations, must be "exaggerated." This is really an approximation or just a schematic of the distribution system, but still reflects the layout and extent of the system.

Once the information is in the computer, it is relatively easy to gather different aspects or summations of the data. For instance, it will be very easy to request that the computer display all the 12-inch-diameter mains that are specifically on the Arch Street Pressure System or how many buildings there are within a 1/4-mile radius of a 16-inch-diameter main.

One item that we, employees in the Engineering Department, have wondered about since we started putting the mains on the computerized system is how much pipe is reflected on the roll maps. I was very surprised by the results when I compared the amount placed in the computerized land-mapping system to date with the amount accumulated over the years by the manual process outlined above. The results of our comparison are truly a reflection of the resolution and accuracy that employees of LRMWW have maintained over the years.

According to the 1991 Annual Report, we had 1,273 miles of pipe within the distribution system. The computerized mapping system generated a total of 1,255 miles of water main. The two figures are amazingly close, a fact that was surprising to me and others. We probably would be even closer if the footage laid up and down slopes was accounted

in the computerized Pulaski Area Geographic Information System.

Every employee who has played a role in accumulating pipe footage data for the annual reports is to be congratulated on the degree of accuracy that has been maintained throughout the years (since 1936) and how close the totals from the roll maps and the digitized mapping system are.

## ClubNews

### Central Arkansas Utility Club

*by David Bowling, Distribution Supervisor, and  
Ken Belk, Distribution Trouble-shooter*

Joseph Qualls, Engineer with the Arkansas Highway & Transportation Department, was the guest speaker for the 1 March 1993 meeting of the Central Arkansas Utility Club. The program topic was "State Highway Projects for 1993."

Thirty-six members and guests were present. Six attendees were employees of Little Rock Municipal Water Works. The meeting was held at Shotgun Dan's Pizza restaurant in Little Rock.

### Central District of AWW&WEA

*Bruno Kirsch, Jr., Assistant Manager*

Jacksonville Water Works defeated seven other water systems for the distinction of having the best tasting drinking water in the Central District. The Central District of the Arkansas Water Works & Water Environment Association held its 4th Annual Drinking Water Taste Contest in conjunction with its 4 March 1993 meeting.

Other water systems participating in the contest were Little Rock Municipal Water Works, which won the title in 1992; the Conway Corporation; Mayflower Water Works Association; Hot Springs Village water system; Hot Springs Municipal Water System; Benton Services Center; and Maumelle Suburban Improvement District #500.

Cliff Shear and Jack Cole, representatives of Wyatt Safety Equipment, were the program speakers for the March meeting of the Central District of AWW&WEA. They discussed confined space safety and demonstrated various pieces of equipment utilized for confined space safety.

Steve Morgan, Assistant Manager of the North Little Rock Water Department, reminded members that the 62nd Annual Conference & Short School of AWW&WEA is set for 25-28 April 1993 at the Arlington Hotel in Hot Springs. Almost 100 technical and professional sessions are slated.

One hundred fifty-three members and guests attended the March meeting at Brown's Country Store & Restaurant on Interstate 30 in Benton. **Larry Rose**, Supervisor of the Ozark Point Water Treatment Plant, won the door prize, a wrist watch.