



OKLAHOMA

water news

MONTHLY NEWSLETTER OF THE OKLAHOMA
WATER RESOURCES BOARD

Gerald E. Borelli, Chairman

Earl Walker • L.L. Males • John B. Jarboe • James H. Norick • R.G. Johnson • Ralph G. McPherson • Boyd Steveson • Ernest R. Tucker

Twelve Area College Students Close out Summer at OWRB

Their backgrounds are as varied as the campuses they came from. College students with majors ranging from filmmaking and fashion merchandising to engineering and zoology, but this summer all 11 sharing the common experience of working at the Oklahoma Water Resources Board.

Five divisions — Stream Water, Ground Water, Engineering, Administration and Water Quality — employed these young people to assist Board "regulars" in the office and in the field. Before May, most of their firsthand knowledge of water had come from the shower, swimming pool or kitchen water tap. They leave OWRB with a greater appreciation for the problems of water supply and demand, quality, and permits for its use.

In the Water Quality Division, Elizabeth Zablatnik, OU environmental sciences major, assisted in water samplings, inspections and computer coding; Delana Haley, OSU fashion merchandising major, served as a secretarial assistant; Pat Dailey, OU zoology major, worked on water quality standards enforcement and inspections; Richard Sheirman, University of Texas filmmaking graduate and OU engineering student, performed inspections; and Robert Miller, OU Environmental Sciences major performed sampling for the Arkansas River Thermal Project.

In the Ground Water Division, Barbara Bowens, a CSU physical education major, was a secretarial assistant;

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OWRB Ground Water Division Joins Tar Creek Investigation

Co-chairmen Ron Jarman, OWRB Water Quality Division Chief, and Ron Coker, leader of an Ottawa County citizens group, met with representatives of 23 state and federal agencies on August 14 for the monthly Tar Creek Task Force update. They learned that the OWRB is continuing a survey of seeps, discharges, mine shafts and drill holes in the former Eagle Picher mine area. Water quality tests are being made weekly by new monitoring equipment at two sites on Tar Creek; one near Commerce, the other in Miami. The additional gages were partially funded through a \$5,300 EPA grant to monitor the contaminant levels of the water in Tar Creek.

Eagle Picher, operator of the once-productive lead and zinc mines, has been asked by Northeastern Counties of Oklahoma (NECO) to release mining operation records to aid in the location of shafts and mines.

Rep. Mike Synar is currently exploring the possibility of federal funding under the Clean Water Act for the project and reclamation measures. To date, funding of the Tar Creek Project has been provided by an \$80,000 appropriation by the Oklahoma Legislature.

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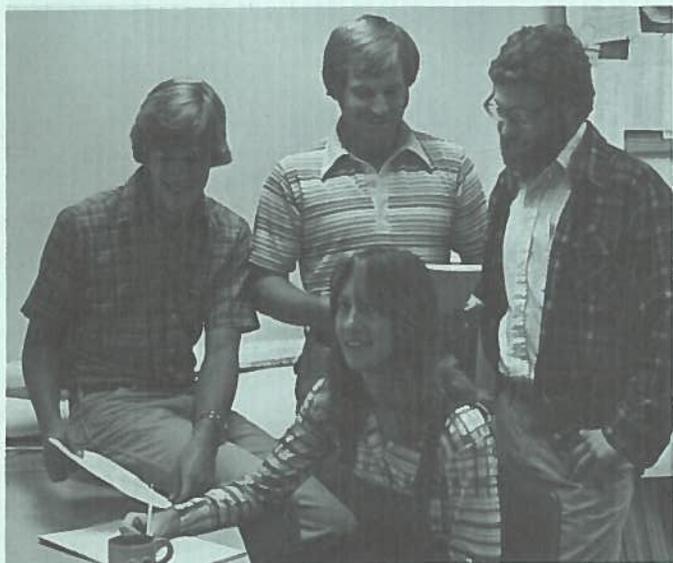


Photo by Tim Kincaid, OWRB staff

Reviewing records gathered as part of the Arkansas River Thermal Project are student employees Pat Dailey (seated) and Robert Miller (left). Standing are Water Quality Division "regulars" Ken Morris (center) and Phil Heard (right).

College Students, continued from page 1

and Russell Hurst, OU petroleum engineering major, and Lisa Funkhouser, OSU geology major, collected well and ground water data.

Lori Bose, Oscar Rose Junior College drafting student, worked this summer plotting dam locations on maps for OWRB's Engineering Division.

Stream Water Division employed Slade Hanson, OU journalism major, to update files and investigate complaints; and Brooks Kirlin, OU chemical engineering major, to update files and process applications.

Tim Kincaid, OU public relations major, assisted in the Board's public information office of Administration.

"It's great for the students and the Board," said James R. Barnett, OWRB executive director. "Working a summer or two with us often piques their interest in a water-related career, and some of them come to us upon graduation for regular employment."

Barnett believes the OWRB policy of hiring young people for the summer is a sound one, providing the students practical experience and an opportunity to learn more about the agency and Oklahoma's water, as well as giving OWRB an opportunity to "recruit" for careers in water.

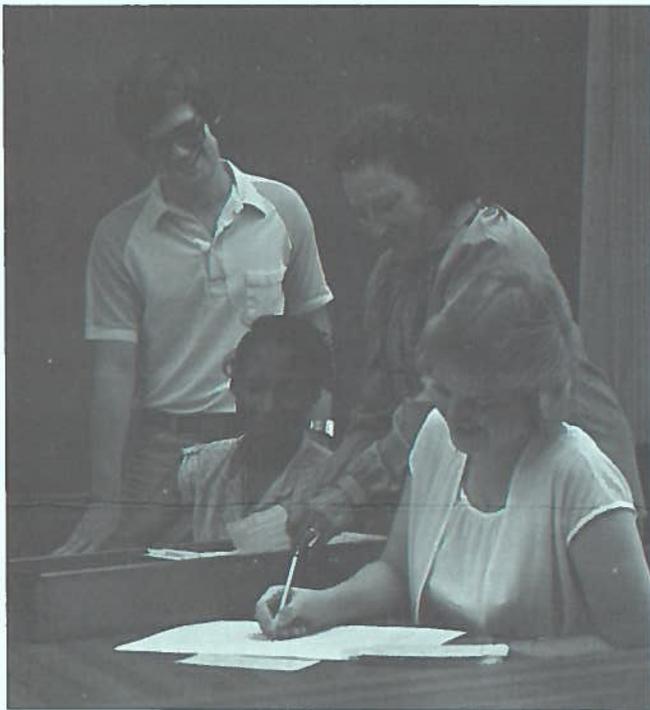


Photo by Tim Kincaid, OWRB staff

Betty Tyson, Ground Water Division secretary, (standing) shows college students Russell Hurst, Barbara Bowers and Lisa Funkhouser the procedure for coding water use cards.

Tar Creek Investigation, continued from page 1

The Corps of Engineers is supporting the investigation by providing a full-time staff member to conduct actual field operations, maintain equipment and monitor new developments in the mine area.

The Tar Creek Task Force has asked OWRB's Ground Water Division to participate in the study by supplying

July 24, 1980

Dear Governor Nigh,

We are Mary Melissa and John Schmidt. We live and go to school in Naples, Italy where our daddy is in the Navy. This summer we came to Miami to visit our grandmama and granddaddy and Heidi our dog. Before we came we looked forward to skipping rocks and playing in Tar Creek. But when we got here it did not look very nice. It is dirty and polluted and we cannot play in it. It could spoil other water in Oklahoma. Could you please clean Tar Creek so it will be nice next time we come for a visit?

Thank you,

Mary Melissa age 8

John Hayden age 6

This letter to Governor Nigh emphasizes that problems are often seen most clearly through the eyes of a child. The Governor answered the childrens' letter, then forwarded it to OWRB, lead agency in the task force charged with the cleanup of pollution in Ottawa County's Tar Creek area. A rising water table caused the heavily polluted water which has accumulated in the abandoned lead and zinc mines to spill onto the surface and contaminate area streams.

information on water wells in northeastern Oklahoma's Boone Aquifer. The Division has recently completed an inventory of all office material on the ground water resources in Ottawa County and provided the task force with information on water wells drilled and completed in the Boone Formation of the Tar Creek area. These records show the location of each water well, total depth, data from drillers' logs and water quality information. This information has been plotted on maps and will be verified during field investigations, when several wells per section will be inventoried and additional data collected.

OU-OSU Study to Measure Benefits of Water Conveyance

The Oklahoma Comprehensive Water Plan completed by OWRB earlier this year proposed a massive conveyance system for the transfer of water from areas of surplus to areas elsewhere in the state where there is or soon will be a water deficit. To evaluate the immense investment for such an intrastate canal system, the Oklahoma Legislature authorized and funded a study by OWRB to assess the statewide economic impact of the system.

The Center for Economic and Management Research at the University of Oklahoma is the prime contracting agency, with the Department of Agricultural Economics and College of Business Administration at Oklahoma State University subcontracted to prepare a portion of the study.

The major objectives of the study are to measure the impact of future water shortages on state economic activity through the year 2040, and to evaluate the direct and indirect benefits of the water conveyance system to the state's economy and to areas outside Oklahoma. The completed study will be submitted to the legislature in January 1981.

Although federal guidelines consider only primary benefits in weighing feasibility for construction, an assessment of secondary and tertiary benefits could justify the state's assuming the portions of the costs which fail to meet federal feasibility criteria.

First Phase of ACOG-GWA Study Over; Phase II Ahead

Central Oklahomans' interest in the vast Garber-Wellington ground water aquifer has led to a study launched last fall by the Association of Central Oklahoma Governments (ACOG) and the Garber-Well-

ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS AS OF AUGUST 11, 1980

PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE	PERCENT OF CAPACITY
SOUTHEAST		
Atoka	70,238	56.9
Broken Bow	778,665	84.8
Pine Creek	69,811	89.8
Hugo	132,496	84.1
CENTRAL		
Thunderbird	97,773	92.3
Hefner	67,839	90.0
Overholser	14,329	94.4
Draper	77,385	77.4
SOUTH CENTRAL		
Arbuckle	58,219	93.0
Texoma	2,446,299	92.7
Waurika	124,425	61.2 ¹
SOUTHWEST		
Altus	58,372	43.9
Fort Cobb	72,372	91.9
Foss	156,226	64.1 ²
Tom Steed	78,367	88.1
EAST CENTRAL		
Eufaula	2,018,339	86.6
Tenkiller	582,686	91.4
Wister	27,100	100.0
NORTHEAST		
Grand	1,231,619	82.5
Oologah	506,802	93.1
Hulah	23,433	76.5
Fort Gibson	365,200	100.0
Heyburn	5,725	79.9
Birch	17,412	90.7
Hudson	200,300	100.0
NORTH CENTRAL		
Kay	422,719	98.6
Keystone	548,062	89.0
NORTHWEST		
Canton	115,219	99.3
Optima	5,769	— ¹
Fort Supply	12,876	92.6
Great Salt Plains	26,780	85.3
STATE TOTALS	10,407,088 ³	88.6

ACOG-GWA Study, continued from page 3

Phase II, now underway, consists of prior rights hearings and work sessions, completed in Cleveland and Pottawatomie Counties in late August, and scheduled for six other central Oklahoma counties in coming months. Prior rights hearings are set for Logan County on September 3; Lincoln, September 10; Canadian, October 1; Payne, October 8; Kingfisher, October 29; and Oklahoma, November 19.

Work sessions held in conjunction with the hearings are scheduled in Logan County September 2-5; Lincoln, September 8-11; Canadian, September 29-October 2; Payne, October 6-9; Kingfisher, October 27-30; and Oklahoma, November 17-21.

Prior rights hearings and the work sessions that accompany them afford the opportunity to establish prior ground water rights for beneficial uses which meet the requirements of laws prior to July 1, 1973, the effective date of Oklahoma's "new" ground water law.



Tulsa Hosts Joint Meetings Sept. 17-20

Concurrent annual meetings of five major water organizations — National Waterways Conference, Inc., Arkansas Basin Development Association, Oklahoma Water, Inc., Arkansas-Oklahoma Port Operators Association, and the American Section, Permanent International Association of Navigation Congresses — will be held at Tulsa's Williams Plaza Hotel on September 17-20.

Featured speakers will include Gov. George Nigh; U.S. Sen. David H. Pryor of Arkansas; and Lt. Gen. John W. Morris, outgoing chief of engineers, U.S. Army Corps of Engineers, Washington D.C.

To mark the 10th anniversary of the Tulsa Port of Catoosa, delegates are invited to tour the port facility and attend an open house on September 20.

ICWP Meeting in Cincinnati Sept. 21-25

The Interstate Conference on Water Problems (ICWP) will hold its annual meeting on September 21-25 in Cincinnati in cooperation with the United States Water Resources Council. Delegates will discuss water for industry, recreation and energy.

House Passes Ground Water Research Bill

The U.S. House of Representatives passed an appropriations bill in August that specifically recommends additional funding for the Garber-Wellington research project. The bill now proceeds to the Senate.

AUGUST CROP AND WEATHER SUMMARY

Although some significant rains occurred in the state after the middle of the month, they were widely scattered and drought continued to take its toll of crops in many areas. Autumn crop yields are expected to drop as much as 50 percent in some areas. Corn has suffered the biggest loss from the prolonged drought, centered mainly in the Panhandle counties. Grain sorghum is down 31 percent from this time last year, and peanut and soybean crops are down 19 percent and 26 percent respectively. With the wheat harvest complete for over a month, the 1980 harvest was the second largest on record.

Maximum soil temperatures were in the upper 90s and low 100s, with minimum temperatures in the mid-80s; all measured at a 4-inch depth.

Oklahoma Crop and Livestock Reporting Service