



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

Panhandle Well Measurements Show Declining Water Levels

Between early January and mid-March many of the desks in the OWRB Ground Water Division remain empty, their occupants in the field engaged in the annual cooperative OWRB-U.S. Geological Survey well measurement program. Well measurement in the three Panhandle counties completed in January marked the beginning of this year's program to record water levels in approximately 1,400 wells throughout the state.

Measurement of 218 Panhandle wells showed an average decline in water levels of 1.38 feet since measurement in January 1980, said J.A. Wood, Ground Water Division chief. Registering the greatest decline were wells in northwest Texas County, where water levels dropped 2.7 feet. The overall decline in Texas County was 1.6 feet. Less significant drops of .74 foot in the southwest and .37 in the southeast portion of the county account for the average figure of 1.6 feet.

Average depth to water was 1.84 feet greater and .72 foot greater in Cimarron and Beaver Counties, respectively, than levels recorded in last year's survey, said Wood.

Wells in those three counties pump water primarily for irrigation from the Ogallala ground water aquifer, western Oklahoma's chief water source, areas of which some experts believe to be threatened by depletion within 20 years.

"Such dramatic declines from last year's levels are due in part to the higher pumpage needed to sustain irrigated crops during the past summer's drought and rapid evaporation rates during the unusually hot, dry growing season," Wood pointed out.

The annual measurements are taken during the winter and early spring months when irrigation has slowed or ceased, permitting the water table to regain static levels.

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Skiatook Lake Project Slowed by Osage Claims to \$1 Billion

Are Osage County's Skiatook and Candy reservoir projects destined to become Oklahoma's own Tellico Dam, with Indian mineral rights standing in for the snail darter? Will 50,000 thirsty residents of the area have oil forced on them as a substitute for drinking water?

Only time will tell. And possibly a lot of time.

Skiatook Lake, first authorized by Congress as a Corps of Engineers project in 1962, got underway in 1976, and by the close of the last federal fiscal year had cost \$48 million. Before the heated controversy flared over the value of mineral rights, the project had a price tag of \$110 million. That total included \$13.2 million for mineral rights to oil estimated by the Corps to underlie 3,000 of the 18,900 acres of surface acquired for the lake. The controversy was fired by Sylvester Tinker, chief of the Osages, whose \$1 billion estimate of mineral values threatens to delay indefinitely the planned 1984 completion of the lake.

The Corps claims the 197 oil and gas wells to be inundated by the impoundment account for only 300 barrels

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STAFF PHOTO BY GARY CLOVER



Water levels below those of 1980 are recorded by Tim Smith in a survey of Panhandle wells completed in January.

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OWRB ground water specialists will continue moving eastward until the study is completed in March, an effort requiring all the manpower the Division can muster.

Norma Aldridge, Mark Belden, Carol Holly, Walid Maher, John Roles, Tim Smith and Dannie Spiser of the Ground Water Division, plus Marc Pulley, borrowed from OWRB's Stream Water Division, have taken to the field to accomplish the annual inventory.

Ground water information is collected throughout the state, but emphasis is placed on regions of extensive pumpage such as the Panhandle, where water levels continue to drop at an alarming rate.

Wood pointed out that the well measurement program provides valuable records of the depth to water below land surface, aids in calculating amounts of ground water in storage, predicts trends which affect ground water availability and provides data for long-term continuous records and planning.

Skiatook Lake, continued from page 1

of oil a day and one million cubic feet of gas — one percent of Osage County's total daily production of 29,710 barrels of oil and 14.6 million cubic feet of gas. The debate stems from a 1976 federal court ruling involving the U.S. vs. the Winnebagos, when the court held that the Indians in Nebraska and Iowa did not have to give up the mineral rights to their land. Prior to that decision, it was common for the Corps to build a dam then pay for the mineral rights when the land was flooded — a procedure followed without a snag in the construction of Keystone, Kaw, Hulah, Birch and other Oklahoma lakes. Thus, the mineral rights beneath Skiatook Lake were not considered an issue when the project first came under consideration in 1962.

Caught in the crossfire between the Corps and the Osages are citizens and officials of Sapulpa, Sand Springs, Sperry, Skiatook and several rural water districts which had been allocated future water supplies from the lake by OWRB.

Unable to acquire subordination rights from the tribe by negotiation last year, the Corps asked the U.S. district attorney to file a condemnation suit in federal court. The Osages argued that Congress had never given the Corps authority to condemn land given the tribe by treaty, and the Bureau of Indian Affairs and the Department of Justice backed them up.

Back to square one for the Corps.

Tied in red tape to the same stake by the Osages are three other water development projects — Candy, Shidler and Sand Lakes. In 1979 the Corps filed a condemnation suit involving land at the proposed Candy site near Avant and spent \$200,000 on an access road, only to be backed down by Osage protests. Similar Osage outcries have helped keep Shidler and Sand Lakes on the drawing board. Shidler Lake would be located just east

of the town of Shidler, and Sand Lake would be nine miles west of Bartlesville.

The Corps attempted a last stand in the waning days of the 96th Congress in the form of a Senate amendment sponsored by Sen. Henry Bellmon which would have subordinated the mineral rights and allowed construction to proceed. Although passed by both houses, the amendment was scalped from the critical appropriations bill upon which it rode, meeting the fate of Custer at the Little Big Horn.

The appropriations bill for Corps water development projects passed in the final days of President Carter's administration included \$11.3 million for continued construction at the Skiatook site. The Corps will proceed with the relocation of Highway 20 and county roads and complete construction of the embankment.

If the Osages have their way, the Corps will have struck the biggest dry hole in the state's history. Not to be ambushed by the Indians at this stage, the Corps will aim for closure this summer, creating a dam which would back up water only when there is a flood on Hominy Creek. In that case, a temporary lake would be formed, holding water only until it could drain through an outlet tunnel, and draining with it northeast Oklahoma's hopes for a permanent water supply reservoir in the near future.

Surveying its position from square one, the Corps is banking on special federal legislation which would appropriate money for the purchase of mineral rights, whatever the cost. Such legislation could lie years away, and the years separating the water users from their lake could evaporate the potential for growth and progress in a half dozen northeast Oklahoma towns.

JANUARY CROP AND WEATHER SUMMARY

A pattern of below normal precipitation set during the past summer's drought continues to dry moisture from plant root zones.

Only south central and southeast regions are exempt from the below normal rainfall readings recorded throughout the state.

If existing conditions prevail, Oklahoma can expect all crops to fall below the 1978-80 average, with oats, barley, rye, grain sorghum, hay, soybeans, peaches and peanuts at or below the lowest production mark in the last 10 years.

Particularly endangered is the irrigated cotton crop in Jackson County watered from Altus Reservoir, where declines in the lake level could sharply reduce irrigated acreage.

Ranchers cut back greatly on stocker and feeder cattle this winter due to grazed-down pastures. Cattle are in fair to good condition statewide.

Oklahoma Crop and Livestock Reporting Service

Third in a Series of Nine

Earl Walker Praises Support For State's Future Water Plans

William Earl Walker adamantly says he's never had an interest in dabbling in politics as his father did. Yet if he were to be a state political figure, Earl Walker would certainly be a people's politician, for he loves to speak his mind.

Appointed to the Oklahoma Water Resources Board in June 1975, Walker is an enthusiastic advocate of developing Oklahoma as proposed in the Oklahoma Comprehensive Water Plan.

"The most important thing Oklahomans need to understand is that we do have plenty of water. The southeast part of Oklahoma has way too much and the northwest and central don't have enough. Our distribution system is our problem," Walker says.

The Oklahoma Comprehensive Water Plan, which was published in 1980, is very important to the people of Oklahoma, Walker believes.

Walker is also very supportive of the Six-State High Plains-Ogallala Aquifer Area Study. When asked about the High Plains Study, scheduled for presentation to Congress in 1982, Walker was frank. "I want the Oklahoma Panhandle to have first crack at the water but I won't mind if they put some Oklahoma water on Colorado wheat. I may want a loaf of bread from Colorado some day!"

The irrigation of the High Plains area is a very important goal for the Oklahoma Water Resources Board, Walker says.

Of the OWRB in general, Walker says, "we've been very fortunate in having two governors who've taken a lot of time to work with water issues. Oklahoma is presently one of the leaders in water resources. Our Board, our people... have kept us in the forefront of the issues."

STAFF PHOTO BY GARY CLOVER



Earl Walker

ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS AS OF JANUARY 15, 1981

PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE (AF)	PERCENT OF CAPACITY
SOUTHEAST		
Atoka	59,700	48.3
Broken Bow	845,700	92.1
Pine Creek	77,700	100.0
Hugo	157,600	100.0
CENTRAL		
Thunderbird	84,465	79.7
Hefner	63,700	85.0
Overholser	15,169	100.0
Draper	77,600	78.0
SOUTH CENTRAL		
Arbuckle	53,811	86.0
Texoma	2,367,200	89.7
Waurika	112,000	55.1 ¹
SOUTHWEST		
Altus	27,486	20.7
Fort Cobb	63,680	81.2
Foss	141,123	57.9 ²
Tom Steed	66,671	75.0
EAST CENTRAL		
Eufaula	1,770,000	76.0
Tenkiller	530,783	83.3
Wister	27,100	100.0
NORTHEAST		
Eucha	25,000	31.4
Grand	1,126,500	87.6
Oologah	458,013	84.2
Hulah	19,528	63.8
Fort Gibson	365,200	100.0
Heyburn	4,413	66.9
Birch	16,040	83.5
Hudson	193,240	96.5
Spavinaw	30,000	98.0
NORTH CENTRAL		
Kaw	390,000	91.0
Keystone	515,152	83.6
NORTHWEST		
Canton	69,324	59.8
Optima	4,471	— ¹
Fort Supply	12,677	91.2
Great Salt Plains	26,373	84.0
STATE TOTALS	9,732,948	82.1³

1. In initial filling stage.

2. Temporarily lowered for maintenance.

3. Lake Optima storage excluded from state total.

Data courtesy U.S. Army Corps of Engineers, Water and Power Resources Service, Oklahoma City Water Resources Dept.

"We do always need additional legislation regarding water resources in order to keep up with the times," Walker states. He hopes the state legislature will "continue to work with and fund the Oklahoma Water Resources Board as they have in the past, accept the Oklahoma Comprehensive Water Plan and push on from there."

Walker is a lifelong resident of the Okemah area. He is the managing partner of Liberty Oil Company, and formerly farmed near his hometown.

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An interest in water issues was sparked for Walker when he served on the Okemah Utility Authority. As chairman he was instrumental in persuading that board to apply for the water rights to Okemah Lake for municipal purposes.

Walker is also a member of Oklahoma Water Inc., and the Deep Fork Watershed Association.

One of Walker's favorite associations is the Oklahoma Heritage Association. He has also been active in Kiwanis International, serving as Texas-Oklahoma governor.

Walker and his wife Vernice have three children, all residents of Oklahoma, and six grandchildren.

Earl Walker is quite optimistic about Oklahoma's future in terms of water.

"We as Oklahomans owe the production of as much food as possible to not only Oklahoma, but America and the world. It's our responsibility both morally and spiritually to find the solution to our water transfer problems, and continue our high output of agriculture products for this country and the world," he concluded.



Corps to Lower Kaw Levels for Wildlife

A plan to lower the water level two and one-half feet during certain times of the year to aid in waterfowl management and improve fishing at Kaw Reservoir was announced by the Tulsa District Corps of Engineers and the Oklahoma Department of Wildlife Conservation.

January 10, the normal pool of 1010 feet was lowered to 1007.5 until March 1. Between March 1 and April 20 the pool will be allowed to rise to normal and will be held at that level until July 15. From July 15 to 25 the pool will be lowered to 1007.5, where it will remain until September 15. Then it will be allowed to rise to 1008.5,

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1000 N.E. 10th P.O. Box 53585
Oklahoma City, Okla. 73152

where it will be held until November 15. From November 15 to January 10 (1982) the pool will again be restored to the normal 1010-foot level.

Please Return Water Use Reports Promptly

"Thirty days hath September..." also water use reports, reminds the Oklahoma Water Resources Board which completed the annual mailing to approximately 12,000 water rights holders on February 1.

The forms which help OWRB estimate the amount of water used annually from stream and ground water sources in the state, are due back in Board offices 30 days after receipt. OWRB also alerts irrigation water users to the slightly different form adopted this year.

President Carter Signs Red River Compact

Twenty-five years after President Eisenhower consented to Oklahoma, Texas, Arkansas and Louisiana to enter into a compact equitably apportioning the waters of the Red River, the compact was signed into law on December 22 by President Carter.

Negotiations which began in March 1956 culminated in an agreement signed by the commissioners on May 12, 1978 at Denison Dam on Lake Texoma. Orville B. Saunders signed as compact commissioner on behalf of Oklahoma. James R. Barnett, OWRB executive director also serves on the compact commission. The Oklahoma Legislature approved it on May 3, 1979, completing the state's fourth and final interstate stream compact.

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