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OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

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*Duane A. Smith
Executive Director*

From the Director

I am pleased to present to you the OWRB's Annual Report for 2000. As many of you know, this agency and its staff have experienced yet another year faced with interesting, exciting and challenging issues which influence the management and protection of Oklahoma's water resources.

This issue of the *Oklahoma Water News* provides an opportunity for us to inform Oklahoma citizens of agency accomplishments and developments during the recently concluded year. As usual, we've encountered numerous opportunities, as well as several tough issues, in our effort to fulfill legislative mandates and directives. During 2000, Oklahomans were assaulted by brutal weather-related disasters — torrential floods, crippling drought, mountains of snow, ice and, of course, severe storms and tornadoes — that tested, and once again affirmed, the capacity of our citizens to withstand sudden misfortune and tragedy.

Staff of the Oklahoma Water Resources Board continue to meet
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Tribal Water Compact, Southeast Plan Highlight OWRB Efforts in 2000

An ambitious attempt to resolve the Sardis Reservoir debt while initiating a ground-breaking water compact between the state and Tribal governments highlighted accomplishments of the Oklahoma Water Resources Board last year. It is with both pleasure and pride that the Water Board presents this summary of noteworthy agency activities during 2000.

State/Tribal Water Compact

In October, the State of Oklahoma and Choctaw and Chickasaw Tribal Governments signed a formal memorandum of understanding that established a course of action for establishment of a State/Tribal Water Compact. The agreement, which will unite existing state water law with century-old Native American water rights claims, represents the first step in an effort to develop a uniform water rights and water quality standards administration system in southeast Oklahoma. The MOU also provides the groundwork through which the Tribes and State will work together to achieve much-needed economic development in southeast Oklahoma.

The first State/Tribal Water Compact negotiations meeting was held November 27 at the State Capitol.

Southeast Oklahoma Water Resources Development Plan

On November 14, the Water Board and Choctaw/Chickasaw Tribes co-hosted the Joint State/Tribal Request for Qualifications (RFQ) Pre-Submission Workshop in Oklahoma City. The RFQ process is the first relevant task addressed under HCR 1109, which directs the OWRB and Choctaw/Chickasaw Tribes to evaluate all feasible proposals for the potential development of southeast Oklahoma waters. Information collected through the RFQ's, submitted December 29, will assist the OWRB and Tribes in determining the ability of potential applicants to finance and participate in the Southeast Oklahoma Water Resources Development Plan. Approximately 40 workshop attendees represented interests in the Sardis Lake and southeast Oklahoma area, Oklahoma City and

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Director . . . Continued

these challenges and enhance the ability of our state to respond to such events in the future. The OWRB continually strives to improve the manner in which we manage Oklahoma's abundant, yet finite, surface and groundwaters, protect supplies from pollution and neglect, and provide the financial resources for water and wastewater infrastructure that is so critically important to the prosperity of Oklahoma communities, especially in rural areas.

The commitment to Oklahomans exhibited by OWRB

2000 Highlights . . . Continued

metropolitan area, Texas municipalities, and various engineering and private firms. Revenue ultimately generated through the final selected proposal(s) will provide for repayment of construction costs for Sardis Reservoir to the Corps of Engineers, assist in establishment of a crucial regional water supply system in the Sardis area and fulfill various other economic development objectives in southeast Oklahoma, including the area encompassed by the Choctaw and Chickasaw Nations.

Drought Monitoring and Mitigation

During the destructive drought of August-September 2000, the OWRB supported an interim legislative study investigating various short- and long-term measures to deal with Oklahoma's extensive agricultural-related losses, including those related to livestock hay shortages and the substantial resources expended to fight wildfires. The committee studied the feasibility of creating an emergency contingency fund to alleviate costs associated with current and future agricultural-related disasters.

The OWRB amplified its continuous drought monitoring duties as chair of the Water Availability and Outlook Committee of the Oklahoma Drought Management Team, created by Gov. Keating in 1996. The Drought Team held two formal meetings at OWRB offices and conducted numerous informal sessions to identify impacted sectors and identify drought mitigation options for Oklahoma.

The OWRB was successful in its efforts to secure \$150,000 in funding for two emergency drought assistance projects through the Bureau of Reclamation. Construction is imminent on a cooperative project to provide water supply for livestock and rural fire protection in Cotton County and a project in Tillman County that will extend water lines from the City of Davidson to thirsty cattle operations west of town. A second grant (\$50,000) from the Bureau of Reclamation augmented OWRB efforts to develop its drought monitoring web site. OWRB staff also worked closely with water users throughout the state to resolve water interference/shortage problems caused by the extended drought.

staff during the agency's recent Strategic Planning process has again reminded me of what competent and caring individuals I am fortunate to call my colleagues at the Water Board. All Oklahomans are indeed fortunate to have such dedicated professionals working on our behalf. In the coming years, rest assured that we will continue to seize opportunities and meet challenges that make a measurable impact on the citizens of Oklahoma and improve their quality of life through our collective role as "The Water Agency."

Beneficial Use Monitoring Program

The OWRB's Beneficial Use Monitoring Program completed its second highly successful year. A 300-page final report was submitted to the State Legislature in February 2000 and remains available for download on the OWRB's web site. The third BUMP report is in development.

Oklahoma Water Quality Standards

The Water Board promulgated groundbreaking Use Support Assessment Protocol (USAP) rules which have been nationally recognized and are now being considered as a template for other states. USAP rules prescribe how Oklahoma state agencies will make decisions regarding whether beneficial uses for individual waterbodies in the Oklahoma Water Quality Standards are impaired, threatened or supported. Specifically, they identify quality assurance and data requirements, statistical manipulation and interpretation options, and thresholds.

The OWRB led the way for the state's environmental agencies in developing Water Quality Standards Implementation Rules for Oklahoma, fulfilling requirements of SB 549, passed in 1999, which requires all state environmental agencies to promulgate into rule how the Standards will be addressed and adhered to through their individual programs. When completed, the agencies will promulgate rules stating how the Standards apply to permits, best management practices, pollution remediation, water rights and related issues.

Update of the Rural Water Survey

The OWRB initiated compilation of data to publish a third, updated survey of rural water systems in Oklahoma. Questionnaires and maps with instructions were mailed to more than 750 rural water suppliers in December 2000 for inclusion in the new "Rural Water Systems in Oklahoma" publication, anticipated for completion early in 2002.

Planning and Technical Studies

During 2000, the OWRB completed four studies in cooperation with the U.S. Army Corps of Engineers under authority of the Corps' Planning Assistance to the States Program:

- ◆ An investigation of a potential regional water treatment and distribution system in the Lake Tenkiller area.
- ◆ A study examining the marketing potential of the McClellan-Kerr Arkansas River Navigation.
- ◆ A geotechnical study of the proposed Mangum Lake reservoir site in southwest Oklahoma. Study results indicated that the location is unsuitable due to gypsum/salt deposits and recommended other potential sites for further study.
- ◆ A geotechnical study on the proposed Holson Creek reservoir site in east central Oklahoma. Study results indicated that the site is unsuitable due to fracturing and faults in the area.

Two special studies were completed during 2000. One study, conducted in cooperation with the Oklahoma Conservation Commission, evaluated groundwater which drains into Twin Caves, near Grand Lake. The second study resulted in identification of groundwater quantity and quality contributions to Lakes Eucha and Spavinaw.

The OWRB also initiated an instream flow study of the Baron Fork River, in eastern Oklahoma, in cooperation with Oklahoma State University. The study seeks to quantify instream flow requirements sufficient to protect the river's environmental benefits while balancing the water supply needs of area residents.



Meteorologists and pilots with the Oklahoma Weather Modification Program utilize two radar bases, high-precision aircraft and a host of sophisticated weather tracking and evaluation tools to pinpoint prime cloud seeding opportunities throughout the state.

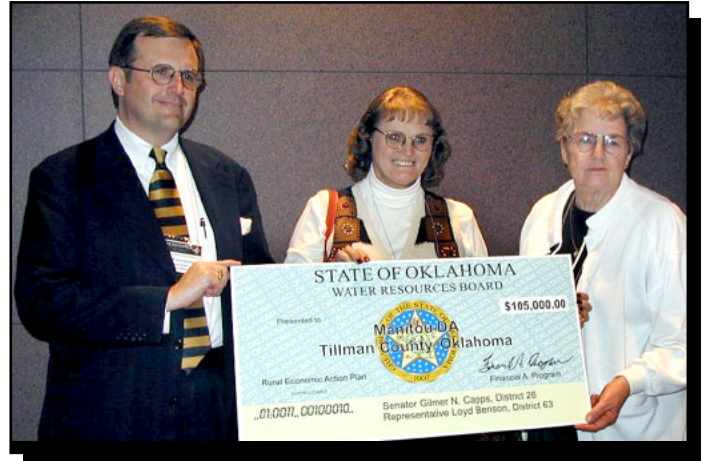
2000 project season; 156 total seeding flights were flown last year — 86 for hail suppression and 70 for rainfall enhancement. The program, initiated in 1996, completed its fifth year of operations.

Financial Assistance Programs

In June, the Water Board closed a \$2.3 million two-year note issue that resulted in the receipt of a \$10,996,702

EPA capitalization grant to help sustain the Board's Clean Water State Revolving Fund loan program. This was the seventh consecutive year that the Board has issued debt to obtain state matching funds without the assistance of any appropriated dollars for the program. The CWSRF debt issuances have resulted in approximately \$73.6 million in capitalization grants for the State of Oklahoma.

During 2000, the Financial Assistance Division completed its eighth Drinking Water State Revolving Fund loan.



During 2000, the OWRB's Financial Assistance Program provided more than \$6.6 million in emergency program and REAP grants and many millions more in loan funds to subsidize the water/wastewater system needs of Oklahoma communities.

Although the DWSRF is the Board's newest loan initiative and, therefore, only minimal funding has been made available for the program, the OWRB has closed 31 percent of all DWSRF loans that have been provided in EPA's five-state Region Six area. In comparison, the State of Texas has completed nine DWSRF loans, only one more than in Oklahoma.

The OWRB's Revenue Bond Issue Loan program was substantially strengthened in 2000. The Board's bond loan portfolio increased to 85 percent ratable from a low of less than 80 percent earlier in the year. The Board approved more than \$62.9 million dollars in loans during 2000. This amount accounts for almost 10 percent of all loans approved in the 15-year history of the Board's loan programs. Total loan amounts outstanding (bond issue, CWSRF and DWSRF) increased to \$320.8 million dollars. Total loan program assets increased to more than \$470.3 million during 2000.

The Board's Emergency Grant and Rural Economic Action Plan (REAP) programs continued to fund the water/sewer infrastructure needs of Oklahoma cities, towns and rural water districts. During 2000, the Board approved 17 emergency grants for \$1,136,479 and 67 REAP grants for approximately \$5.5 million.

Water Quality Studies and Projects

The Water Quality Division completed several vitally important Clean Lakes Program projects, including:

- ◆ a revegetation project at Lake Wister to control sediment loading problems;

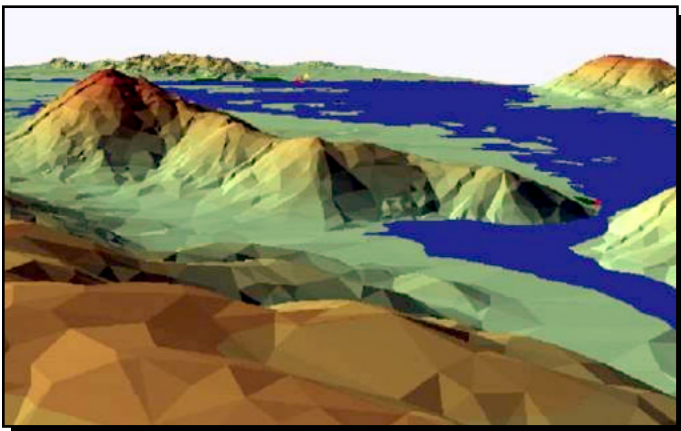
- ◆ the Meadow Lake (Enid) Clean Lakes Program restoration project;
- ◆ a Clean Lakes Program study on Arcadia to investigate ongoing or potential problems with the City of Edmond's water supply reservoir;
- ◆ a four-year Clean Lakes Program project to restore the recreational benefits of Carmen Lake, in north central Oklahoma; and
- ◆ a special study of southwest Oklahoma's Lake Frederick to mitigate deteriorating water quality in the reservoir.

In addition, two far-reaching water quality studies – involving the City of Tulsa's water supply in the Eucha/Spavinaw watershed and Oklahoma City's multi-reservoir water system — also neared completion at the closing of 2000. The studies seek to assess the impacts of suspected contaminants from poultry and confined animal feeding operations, respectively, to those valuable water resources

Technology Development and Implementation

The agency continued to maximize efficiency through investment in emerging technologies, including the OWRB's Geographic Information System (GIS) – implemented, developed and maintained by the OWRB's Information Services Section – which continued to play an invaluable role in the planning and policy-making decisions of various agency projects:

- ◆ GIS tools have enabled the OWRB to comprehensively analyze the hydrological makeup of southeast Oklahoma's water resources, including surface water availability and lake storage capacities, under the Southeast Oklahoma Water Resources Development Plan.
- ◆ GIS coverages were finalized for the Lugert-Altus



The Board's GIS has provided unique and invaluable 3D perspectives of Sardis Lake and surrounding topography in the Kiamichi River Basin.

Irrigation District Project. The resulting enhanced ability to display and demonstrate the District's irrigation canals, water flow control structures and related facilities will enable the District to optimize its water usage.

- ◆ Bathymetric mapping and volumetric studies were completed on eight lakes in the state (Eucha and Spavinaw for the City of Tulsa, Frederick Lake for the City of Frederick, and Atoka, Draper, Hefner, McGee Creek, and Overholser lakes for the City of Oklahoma City). The studies included 3D and contour mapping to determine current lake storage capacities.
- ◆ GIS assisted the agency's Dam Safety Program in several dam breach analysis projects during the year. GIS enabled staff to predict areas of floodwater inundation resulting from a dam breach. 3D maps and graphics were produced to help identify the effected areas.
- ◆ The OWRB's GIS and Global Positioning System (GPS) were used to map and display more than 900 individual plant locations around Lake Wister for the Plant Inventory and Growth Study. The data will be used to track and monitor the growth of aquatic plants around the lake.
- ◆ Customized maps and GIS programs were created to facilitate the distribution of wetland maps to the public. The maps and programs allow staff to quickly locate and reproduce requested maps.
- ◆ The Information Services Section continued implementation and refinement of the agency's electronic document management and workflow system for water rights administration, including the imaging of 61,806 pages of water rights and well log documents.

OWRB Web Site

The Information Services Section and various OWRB staff expanded, maintained and improved the OWRB's award-winning web site, including the Drought and Water Resource Monitoring and Oklahoma Weather Modification Program pages. In addition, continued development and expansion of online agency forms, reports, rules, financial documents and related materials during the year resulted in a noticeable decrease in staff time/workload as well as postage expenses.

During 2000, the agency also established the intra-agency Web Site Development Team to identify web issues, assess agency needs and plan web site development. A web site plan was developed to outline incremental phases for implementing the agency's web site goals. In addition, the OWRB's Data Collection and Dissemination Committee initiated a comprehensive inventory and evaluation of the agency's extensive set of stored data for eventual public distribution.

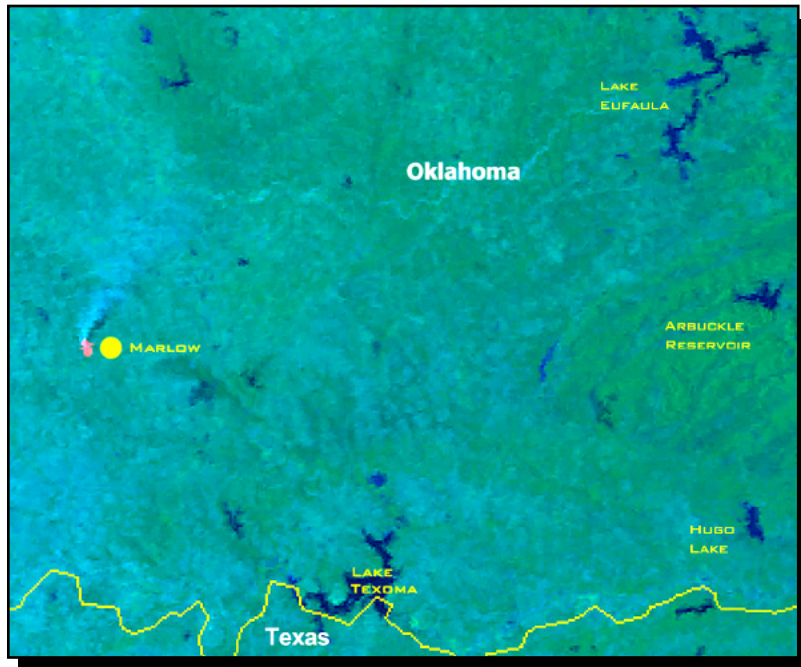
to promulgate into rule how Oklahoma's Water Quality Standards will be addressed and adhered to though their individual programs, the OWRB will continue to modify its permitting, financial assistance and other programs to best comply with Standards requirements.

During 2001, Board staff will conduct extensive research, keyed through public input, to develop appropriate Standards Implementation language and rules pertinent to water management programs. Particular emphasis will be placed upon development of biological thresholds, establishment of Nutrient Limited Watershed impairment determination procedures, refinement of Use Support Assessment Protocol (USAP) procedures and further development of increasingly important groundwater quality standards.

The Water Board will also continue to build upon past successes as the custodian of Oklahoma's Water Quality Standards. In 2000, the agency promulgated groundbreaking, nationally recognized USAP rules which are now serving as a template for other states. USAP rules prescribe how Oklahoma state agencies determine whether beneficial uses for individual waterbodies in the Oklahoma Water Quality Standards are impaired, threatened or supported.

Drought Response Preparedness

In 2001, the OWRB will play a key role in improving the effectiveness of Oklahoma's drought response and in mitigating the extensive social and economic hardships associated with drought events. As chair of the Water Availability and Outlook Committee of the Oklahoma Drought Management Team, created by Gov. Keating in 1996, the Water Board coordinates the collection of critically important weather- and moisture-related data that signals the potential onset of all-too-frequent drought events in Oklahoma.



This NOAA satellite image shows the significant heat signature and smoke visible from a drought-induced wildfire in early October just west of Marlow, in south central Oklahoma.

funding source(s) for BUMP as well as opportunities for expansion of the program into other sampling arenas, including groundwater monitoring and assessment.

Through BUMP data collection efforts, decision-makers ensure that state surface and groundwaters are maintaining beneficial uses and waters are meeting numerical/narrative criteria assigned to them in Oklahoma's Water Quality Standards.

Data Collection and Dissemination of Water-Related Information

To further establish and expand the OWRB's role as the water agency in Oklahoma, the Water Board will strive to provide more and better quality information that enables targeted customers to make more effective water quality- and quantity-related decisions. Enhanced data management, organization and prioritization will be required to maintain and expand the agency's data collection and dissemination role. A major component of the data/information dissemination process is the continued development of the agency's web site and associated web resources to provide improved customer service.

In 2001, the OWRB will nurture existing partnerships with other involved state agencies and organizations in an effort to identify, explore and implement measures – including update of the Oklahoma Drought Management Plan, potential survey of the raw water supply adequacy of Oklahoma's rural water systems, expansion of uses of the State Hazard Mitigation Program/Fund and identification of other potential sources of financial assistance — to improve Oklahoma's ability to prepare for and respond to state drought situations.

Beneficial Use

Monitoring Program

During the third year of the OWRB's highly successful Beneficial Use Monitoring Program (BUMP), the agency will seek to refine and expand the program and increase its stability as a long-term state water quality monitoring effort. The Water Board's Strategic Planning Team has targeted identification of a long-term

Water Resources Update

Reservoir Storage

Reservoir storage levels in Oklahoma remain very good throughout most of the state. As of February 26, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 99.4 percent full, a 1.8 percent increase from that measured on January 16, according to information from the [U.S. Army Corps of Engineers \(Tulsa District\)](#). Only two reservoirs – Fort Supply and Foss — have experienced lake level decreases since that time. Five reservoirs are operating at less than full capacity (compared to 9 last month). Two reservoirs (Lugert-Altus and Tom Steed) remain below 80 percent capacity;

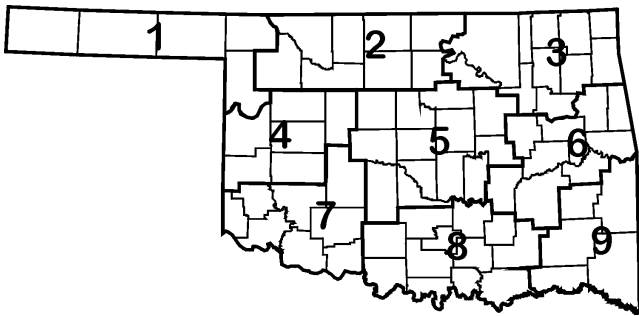
Storage in Selected Oklahoma Lakes & Reservoirs

As of February 26, 2001

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage	
			Conservation	Flood
NORTH CENTRAL	412,635	411,953	99.8	8.78
NORTHEAST	3,484,317	3,480,858	99.9	26.61
WEST CENTRAL	276,790	274,318	99.1	0.53
CENTRAL	154,225	154,225	100.0	8.34
EAST CENTRAL	3,022,323	3,022,323	100.0	48.65
SOUTHWEST	301,810	234,298	77.6	1.47
SOUTH CENTRAL	2,795,156	2,795,156	100.0	28.73
SOUTHEAST	1,464,929	1,464,929	100.0	43.04
STATE TOTALS	11,912,185	11,838,060	99.4	23.35

Drought Indices

According to the latest [Palmer Drought Severity Index](#) (February 24, below), moisture/drought conditions continue to improve dramatically throughout Oklahoma. None of the state's nine climate divisions have undergone PDSI moisture decreases since January 13; the Southwest climate division ("very moist") experienced the most modest increase during the period. The "driest" region is the Northeast ("unusually moist").



The latest monthly [Standardized Precipitation Index](#) (through January, below) indicates that no climate divisions in Oklahoma are experiencing long-term dryness (among the selected time periods: 3-, 6-, 9- and 12-month). In addition, no regions are experiencing dryness over various time spans within the past six years.

Palmer Drought Severity Index

Standardized Precipitation Index

Through February, 2001

Climate Division (#)	Current Status 2/24/2001	Palmer Drought Severity Index			Standardized Precipitation Index			
		Value 2/24	1/13	Change In Value	3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	VERY MOIST SPELL	3.11	1.56	1.55	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NORTH CENTRAL (2)	EXTREME MOIST SPELL	4.19	2.89	1.30	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
NORTHEAST (3)	UNUSUAL MOIST SPELL	2.54	0.76	1.78	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
WEST CENTRAL (4)	VERY MOIST SPELL	3.14	2.11	1.03	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
CENTRAL (5)	EXTREME MOIST SPELL	4.00	2.73	1.27	MODERATELY WET	NEAR NORMAL	MODERATELY WET	MODERATELY WET
EAST CENTRAL (6)	VERY MOIST SPELL	3.64	1.56	2.08	MODERATELY WET	NEAR NORMAL	MODERATELY WET	NEAR NORMAL
SOUTHWEST (7)	VERY MOIST SPELL	3.87	3.02	0.85	MODERATELY WET	MODERATELY WET	NEAR NORMAL	MODERATELY WET
SOUTH CENTRAL (8)	EXTREME MOIST SPELL	4.35	2.79	1.56	VERY WET	MODERATELY WET	NEAR NORMAL	NEAR NORMAL
SOUTHEAST (9)	VERY MOIST SPELL	3.47	2.02	1.45	VERY WET	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL

Financial Assistance Program Update

Approved at January 9 and February 13, 2001 Board Meetings

			Financial Assistance Program Update	
FAP Loans				
01/09/01	1 Tulsa Municipal Authority, Tulsa County	\$8,330,000.00		
02/13/01	1 Harrah Public Works Authority, Oklahoma County	\$605,000.00		
	2 Lawton Water Authority, Comanche County	3,495,000.00		
	3 Okeene Public Works Authority, Blaine County	300,000.00		
	4 Rural Water District #13, Cherokee County	1,195,000.00		
	5 Rural Water District #15, Osage County	565,000.00		
CWSRF Loans				
01/09/01	1 Tulsa Municipal Utility Authority, Tulsa County	\$4,995,554.11		
	2 Tulsa Municipal Utility Authority, Tulsa County	4,000,000.00		
02/13/01	1 Antlers Public Works Authority, Pushmataha County	\$14,242.80		
	2 Lawton Water Authority, Comanche County	2,035,000.00		
	3 Spiro Municipal Improvement Authority, LeFlore County	880,000.00		
DWSRF Loans				
02/13/01	1 Hennessey Utility Authority, Kingfisher County	\$1,417,150.00		
	2 Hominy Public Works Authority, Osage County	950,000.00		
	3 Okeene Public Works Authority, Blaine County	343,400.00		
Hardship Grants - None				
Reap Grants				
01/09/01	1 Hardesty Municipal Authority, Texas County	\$47,018.43		
	2 RWS & SWM District #3, Roger Mills County	149,510.00		
02/13/01	1 Maud Municipal Authority	98,704.28		
	2 RWS & SWM District #3, Osage County	43,110.00		
	3 Town of Braman, Kay County	48,189.00		
	4 Optima Public Works Authority, Texas County	96,940.00		
			Totals as of 2/13/2001	
			FAP Loans	
			#Approved	231
			Amount	\$697,234,745.00
			CWSRF	
			#Approved	105
			Amount	\$352,527,730.00
			DWSRF	
			#Approved	12
			Amount	\$32,132,504.90
			Hardship Grants	
			#Approved	2
			Amount	\$1,038,752.30
			Emergency Grants	
			#Approved	464
			Amount	\$26,963,033.26
			REAP Grants	
			#Approved	268
			Amount	\$21,995,333.18

OKLAHOMA Water News

Bimonthly Newsletter of the

Oklahoma Water Resources Board

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OKLAHOMA Water News

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From the Director



Duane A. Smith
Executive Director

On the legislative front, the OWRB is following several important measures currently under consideration at the State Capitol. I'd like to mention just a few.

A "hog-related" bill, HB 1237, could have a significant impact on the regulation of confined animal feeding operations in Oklahoma. HB 1237 attempts to define "camp and recreation sites" as they relate to the existing three-mile set-back rule which applies to swine feeding facilities and groundwater permit administration. (Due to potential odor and related problems, state law currently prohibits the Board from issuing or amending groundwater permits for those operations within three miles of recreational areas, church camps, etc.) HB 1237 would provide a 60-day minimum usage time requirement for camps and recreation sites.

HCR 1008, discussed in more detail in this issue of the Water News, is

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Legislature Mulls First Interstate Groundwater Compact



In March, the Oklahoma House of Representatives approved legislation proposing Oklahoma's first multi-state groundwater compact. House Concurrent Resolution 1008, authored by Rep. Clay Pope, directs the OWRB to contact other High Plains states water officials, as well as appropriate federal agency representatives, to initiate formal dialogue and negotiations that would result in the formation of a water compact to address common issues related to the conservation of the Ogallala Aquifer. Rep. Pope is a member of the House Committee on Environment and Natural Resources.

The enormous and extraordinarily prolific aquifer underlies about 174,000 square miles of land in the U.S. High Plains, including approximately 7,100 square miles

in Oklahoma. The groundwater basin also underlies portions of Texas, New Mexico, Kansas, Colorado, Nebraska, South Dakota and Wyoming. The State of Kansas is currently considering similar legislation that would facilitate an interstate agreement concerning the Ogallala's preservation.

Oklahoma currently participates in four separate interstate *stream* water compacts -- the Arkansas River Compact with Arkansas; Arkansas River Compact with Kansas; Red River Compact with Arkansas, Louisiana and Texas; and Canadian River Compact with New Mexico and Texas -- that serve to assure the receipt of adequate surface flows/releases from upstream states and to address common water quality concerns. While a similar agreement based on shared *groundwater* resources has never been attempted in Oklahoma, the task and potential benefits provide an exciting challenge for state water administrators, according to Duane Smith, OWRB Executive Director.

"The impetus for groundwater compacting has intensified over the past decade or so and it's appropriate

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Director . . . Continued

an exciting piece of legislation that lays the foundation for creation of Oklahoma's first interstate groundwater compact. Involving the Ogallala (High Plains) Aquifer and the many associated water quality and quantity issues which impact its supplies, the measure directs the OWRB to begin preliminary discussions on compact development with other U.S. states overlying this vitally important resource.

SCR 18 recommends that the State of Oklahoma seek relief through the U.S. Supreme Court regarding a potential violation of the 1950 Canadian River Compact between the States of Oklahoma, Texas and New Mexico. The violation in question is the construction of Palo Duro Reservoir on Palo Duro Creek, a tributary of the Beaver-North Canadian River, about 12 miles upstream of the state line in Texas. Reduction in river flows, resulting from the impoundment and currently under dispute, could have a significant impact on water levels at Canton Lake, an upstream water supply source for the City of Oklahoma City. To date, Texas has refused to acknowledge the alleged violation.

Concerning our appropriations bill, we've met with members of the Senate Natural Resources and Regulatory Services Appropriations Sub-Committee who appear very supportive of funding requests which would provide the backbone for several crucial and successful agency programs. Long-term funding for the OWRB's Beneficial Use Monitoring Program is one of our top priorities. The BUMP effort, which has become a model for the nation, is vital in our determination of Oklahoma's success in mitigating water quality problems – i.e., “are we getting the job done?” As we fold groundwater protection and other priorities into the program, base funding for BUMP will become even more important.

Another top agency priority is securing funds to provide for proper review of water use applications to ensure that waste by pollution will not occur. A memorandum of understanding currently under development between the OWRB and State Department of Agriculture would establish a system through which ODA reviews protested swine facility water use permit applications and then submits a formal recommendation to the OWRB for approval at the required public hearing. This improved, though more intensive, process will require a substantially greater investment in staff time and related resources.

As always, we'll continue to closely monitor legislation that impacts how we manage our water resources for the people of Oklahoma as well as other important environmental bills and issues. Regardless of the outcome, we should all recognize that our representatives at the State Capitol have a very difficult job and strive to do their very best for all Oklahomans.

Groundwater Compact . . . Continued

that the initial agreement of this type will center on protection of the Ogallala,” he pointed out.

Much of western Oklahoma and the Panhandle region, not to mention surrounding states, rely almost exclusively upon the Ogallala for their water needs, including irrigation and various agricultural uses, drinking water supply and municipal and industrial use. During a peak irrigation day, Texas County, which is completely underlain by the formation, uses as much water as New York City in an average day (approximately 4,300 acre-feet or more than 3.8 million gallons). The Ogallala contains an estimated 86.6 million acre-feet of water -- enough to cover the entire state two feet deep – yet its supply is not unlimited, from either a quantity or quality standpoint.

“Oklahoma and the other states who share this extensive and valuable water resource are faced with numerous issues that have substantial impacts on both the present and future use of the Ogallala, especially concerns surrounding potential depletion of the aquifer and impacts of concentrated animal feeding operations on water quality,” Smith added. “I think a compact agreement could have an enormous influence on prolonging both the life of the Ogallala and the economic welfare of Oklahoma and its neighboring states.”

Stream water compacts clearly spell out how much water a signatory state is allowed to develop or store on an interstate stream. Generally, they provide a means of working out problems between states in an orderly manner, often preventing potential litigation. The OWRB supports the state's compact commissioners in negotiating and administering the interstate agreements. The agency will assume a similar role upon development and ratification of a compact on the Ogallala Aquifer.

GIS Day at the Capitol

Mike Sughru, OWRB GIS Specialist, greets Senator Johnny Crutchfield at GIS Day held February 27 at the State Capitol. The event allowed various state and federal agencies, as well as vendors, to showcase their Geographic Information System products and capabilities.



OWRB Notes Receive Top Ratings

April 11 note sales from the OWRB's Clean Water and Drinking Water State Revolving Funds received Standard and Poor's top ratings. Fitch, Inc., a New York City rating service, gave the \$4,385,000 Clean Water State Revolving Fund (CWSRF) Series 2001 Note Issue a "F1+" rating while the \$4,590,000 Drinking Water State Revolving Fund (DWSRF) Series 2001 Note Issue was assigned the group's "AAA" ranking.

"We are very pleased and honored to obtain these high ratings," said Joe Freeman, Chief of the OWRB's Financial Assistance Division. "Then again, these evaluations just reflect the great stability and success of our loan programs." The OWRB is the chief financing agency of water and wastewater projects in Oklahoma.

The OWRB's DWSRF notes will fund two years of state match monies to provide the necessary 20 percent required to leverage capitalization grants under the federal Safe Drinking Water Act. Loans for qualified drinking water system projects are secured by revenue pledges of the local entities' water systems.

The notes are secured by the interest portion of loan repayments from outstanding DWSRF direct loans, existing and new interim construction loans, and existing and new small community loans; interest earnings on the DWSRF account; and principal repaid on outstanding loans. A debt service reserve is funded at \$3.11 million. In the event of a draw on the reserve, the reserve will be replenished from DWSRF revenues. Since the inception of the DWSRF program, the state has approved 12 loans for \$32.1 million.

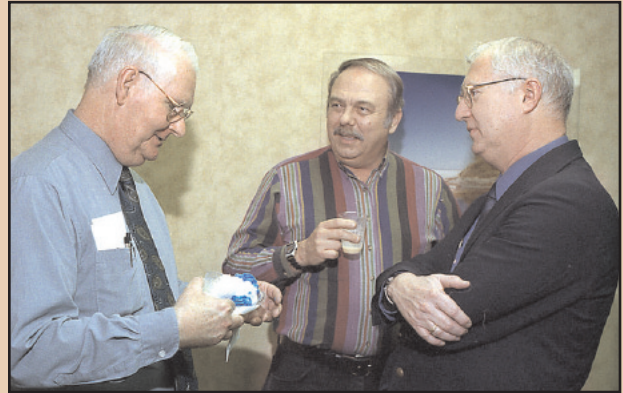
Concurrently, the OWRB's \$4.39 million issue of Clean Water State Revolving Fund notes will provide two years of state match monies to leverage federal capitalization grants under the federal Clean Water Act. The state and federal monies will be used to make loans to qualified local entities to finance local wastewater system projects. Similar to the DWSRF, Clean Water loans are secured by revenue pledges of the local systems.

The CWSRF notes are secured by the interest portion of local loan repayments from existing CWSRF interim construction direct loans; interest payments on existing and new small community loans; interest earnings on the CWSRF account, and interest on new construction loans not funded from bond proceeds. Since the inception of the CWSRF program in 1988, the board has approved 105 loans for \$352.5 million.

FAD's Daugherty Retires

Reese Daugherty, long-time "engineer extraordinaire" in the OWRB's Financial Assistance Division, retired March 1. The event was marked by a February 28 party held for Reese by his agency colleagues and friends.

A Professional Engineer and former OWRB Employee of the Quarter, Daugherty served the agency, as well as the water/wastewater financial needs of countless Oklahoma communities, for more than 15 years. Prior to joining the OWRB, he worked more than 20 years for private engineering firms, the Corps of Engineers, Tennessee Valley Authority and as the Bethany city engineer. OWRB staff and friends wish Reese a long, enjoyable and much-deserved retirement.



Reese Daugherty shares a moment at his reception with fellow employee, Gary Glover and former employee, Harold Springer.

Cloud Seeders Initiate 2001 Program

On March 1, Oklahoma cloud seeders officially began operations for the 2001 project. However, considering the relatively wet conditions throughout much of Oklahoma, hail suppression will be the primary focus of the program.

"After a four-month recess, we're pleased to get our pilots back in the air," said Senator Robert M. Kerr, President of the Oklahoma Weather Modification Advisory Board, although he added that "stand-down" operations will be employed for much of Oklahoma due to the recent abundant rainfall received throughout the state. "Only a few drier western tier counties, along with the Panhandle region, will be considered for rainfall enhancement activities until the state dries up a bit. However, hail suppression operations will be considered statewide as those opportunities arise," he pointed out.

Each of the two weather modification facilities, located at Oklahoma City's Sundance Airpark and Woodward Airport, employ a radar with aircraft tracking capabilities and a full complement of meteorological data systems. They also

serve as headquarters for equipment storage and maintenance of the program's three aircraft.

Although the Oklahoma Weather Modification Program (OWMP) was initially created in direct response to the 1996 drought as a long-term water management tool, perhaps the most important benefit of the program has been its focus on reducing potential hail damage to crops and property. Oklahoma crop losses due to hail average approximately \$2.5 million per year in loss claims alone -- not including property/casualty claims. The program currently operates on an annual budget of approximately \$1 million through legislative appropriations.

"Even within the past decade or so, we've had localized hailstorms in Oklahoma responsible for millions of dollars in damages. By reducing the size of hail stones and the subsequent damage they could inflict, the program could pay for itself through mitigating just one storm event," Kerr emphasized.

The Weather Modification Advisory Board was created by the State Legislature in 1999 to oversee the program and coordinate a mechanism that provides long-term program funding through voluntary assessments provided by state property/casualty insurance companies. The cooperative state/private insurance cost-share effort, emphasizing hail suppression benefits, targets as much as \$3 million per year for expansion of the program. The Advisory Board is also considering implementation of a companion research program -- potentially through the Oklahoma Climatological Survey through funding provided by the Oklahoma Center for the Advancement of Science and Technology (OCAST) -- to gather data, measure success and identify measures to improve the state's cloud seeding effort.

The 2001 OWMP is scheduled to run through October 31. For the sixth consecutive year, Weather Modification, Inc., based in Fargo, North Dakota, will perform actual cloud seeding activities throughout the state and along the state borders into Kansas and Texas, as needed.

According to Duane Smith, Executive Director of the Oklahoma Water Resources Board and Chairman of the Advisory Board, those involved with the OWMP, as well as other state efforts, are bolstered by the results of a recent study of cloud seeding programs in Mexico and South Africa. "This randomized study concluded that the two programs, operating in different parts of the world under dissimilar climatic conditions, achieved essentially identical results. This replication of two separate experiments is a first in the history of cloud seeding research," he said.

OWRB/OFMA Host Legislative Receptions

In an effort to enhance existing relations and communications with the State Legislature, the Water Board and Oklahoma Floodplain Managers Association hosted two legislative receptions at the State Capitol February 13 and 14, respectively. The two events were well-attended and the OWRB

and OFMA thank legislators and their staff for their many useful suggestions and comments.



Representative Larry Ferguson; Board Members Wendell Thomasson and Ervin Mitchell; Senator Gilmer Capps; and Senator J. Berry Harrison.



Board Member Richard Sevenoaks; OWRB Executive Director Duane Smith; and Representative Randall Erwin.



Ken Morris, OWRB NFIP Coordinator; Lonnie Ward, FEMA, Region Six; and



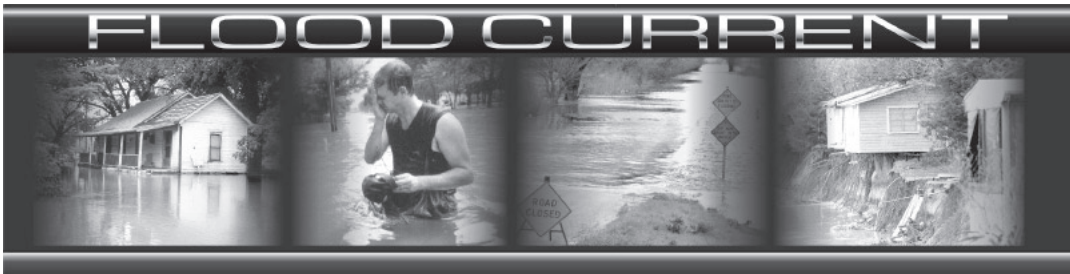
Anna Wagoner, OFMA Chair; and Representative Elmer Maddux.

Julie Cunningham Honored as Employee of the Quarter

Julie Cunningham, of the Board's Financial Assistance Division, received the Employee of the Quarter Award during the OWRB's March staff meeting.

Cunningham, who recently transferred from the Water Quality Division, was lauded especially for her work in both the Oklahoma Water Quality Standards and Oklahoma Water Watch programs.





NFIP Standards Scrutinized

Important Legislation Under Consideration

By W. Kenneth Morris, CFM, State NFIP Coordinator, OWRB

Although the National Flood Insurance Program (NFIP) offers numerous benefits, minimum NFIP standards are just not getting the job done. Although member communities do a generally good job of enforcing their ordinances, flood losses continue to climb; today, annual flood losses in the U.S. amount to an astounding \$6 billion.

More stringent standards are needed to accomplish flood loss reduction goals and protect the natural and cultural benefits of the floodplain. The Association of State Floodplain Managers, Inc. has developed a new “No Adverse Impact Floodplain” initiative to scrutinize current floodplain management techniques employed throughout the U.S. I encourage all floodplain officials to take an objective view of their procedures and ensure that all new construction is intelligently planned. To read more about the “No Adverse Impact Floodplain” initiative, visit the ASFPM web site at www.floods.org.

Once again, the OWRB will be hosting five “Floodplain 101” workshops in May, Flood Awareness Month. Instructors will represent FEMA, Civil Emergency Management and the OWRB. Three Continuing Education Credits may be earned through completion of each one-day workshop. The CFM exam will be offered following each workshop for pre-approved candidates. Also, I strongly encourage all NFIP member communities in Oklahoma to plan their own floodplain workshop this spring to alert their residents of the dangers of flooding and educate citizens

about the importance of the natural and cultural benefits of the floodplain, including recreation, water quality improvement, storage of flood waters and habitat.

Two important measures, currently under consideration at the State Capitol, could have a significant impact on floodplain management in Oklahoma. Legislation originating in the House of Representatives (formerly HB 1949, authored by Rep. Larry Rice, Senator Kevin Easley and Rep. Ray Vaughn) would facilitate the appropriation of \$1 million for the Oklahoma Flood Hazard Mitigation Account. This legislation, which would provide the necessary funding for small communities to purchase repetitively flooded structures, is important because it provides a fund and system through which the State of Oklahoma is responsible for its own mitigation efforts, rather than through federal hand-outs.

Another noteworthy bill under deliberation is HB 1329, authored by Rep. James Covey, Rep. Purcy Walker and Senator Kevin Easley. This legislation, allowing boards of county commissioners and/or floodplain boards to charge up to \$500 for services provided under the Oklahoma Management Act, authorizes the OWRB, boards of county commissioners and municipal governing bodies to establish “reasonable fees” up to \$500 for administrative services – related to administration of floodplain development permits and related tasks -- provided to citizens, consultants, insurance agents, engineers and others under the Oklahoma Floodplain Management Act. These fees would assist communities in recouping the often substantial costs associated with local floodplain management tasks.

Finally, I encourage you to check out the web site of the Oklahoma Floodplain Managers Association at www.okflood.org. The site offers excellent information regarding ongoing floodplain management activities in the state.

Flood Map Ordering Made Easy

The Federal Emergency Management Agency has announced that their Map Service Center now offers on-line ordering and payment of community floodplain boundary maps for business customers. This much-needed “e-commerce” service completes the first phase of FEMA’s mapping modernization effort, initiated last year.

Individuals wishing to purchase flood maps and related products for personal use and fee-exempt federal, state and local government agencies will be able to place orders on-line by this summer. In the meantime, they are encouraged to call MSC Customer Service at 1-800-358-9616.

The FEMA Map Service Center Flood Map Store, available at www.fema.gov/MS, features interactive map search capabilities. Consumers may order the map of their choice through entering either the street address, map panel number or community number.

Cities, Towns Asked to Assess Flood Mapping Needs

More than 19,000 communities use flood maps produced by the Federal Emergency Management Agency (FEMA) to assess the flooding risks assumed by countless citizens residing within or near the nation's designated floodplains. To counter potential problems caused by obsolete or inaccurate flood maps, the agency is asking the nation's floodplain officials to assess and document their community mapping needs. Flood Insurance Rate Maps (FIRM's) are a vital facet of the National Flood Insurance Program (NFIP).

Local floodplain officials in Oklahoma are encouraged to review their flood hazard maps and contact James Orwat, with FEMA, 940-898-5302 to submit their mapping needs. Mr. Orwat can also provide communities with additional information and a worksheet, as well as guides that assess and document mapping requirements.

FEMA's ongoing Flood Hazard Mapping Modernization Plan strives to identify flood hazard mapping needs, maintain a national inventory of needs, and prioritize those needs so that maps can be updated as funding becomes available. FEMA has categorized mapping needs into two types: 1) maintenance needs are non-technical in nature and consist of the addition of streets and street names, elevation reference marks, alignment of map panels, addition of Letters of Map Change, conversion to a countywide map format and integration of corporate limit changes; and, 2) flood data update needs are technical in nature and consist of modifications in the hydrologic and hydraulic conditions affecting a community. If more than one flood source in a community is in need of update, an additional data collection worksheet will be needed for each flood source.

The stated goals of FEMA's mapping program are to ensure that all flood-prone communities have accurate NFIP maps that provide the necessary level of detail for community planning, floodplain management and mitigation activities; increase community involvement and responsibility in maintaining flood maps; increase public accessibility to the maps and related flood hazard data; enable easier and more timely map revision; increase public awareness of floodplains and the need for flood insurance; and encourage the creation of data-sharing partnerships between federal, state and local governments.

March, May Get Flood Month Pronouncements

To promote the availability of state and federal assistance through the Federal Emergency Management Agency's National Flood Insurance Program (NFIP), as well as the awareness of flood dangers, Governor Frank Keating recently declared March 2001 as Flood Insurance Month and May as Flood Awareness Month.

"The Governor's proclamation provides the OWRB, insurance companies and emergency management

organizations with a valuable opportunity to spread the word on the availability of relatively inexpensive flood insurance," said Duane Smith, OWRB Executive Director. "Because we experience so many damaging flooding events in April and May, now is the time for those citizens who reside in designated floodplains but do not currently possess a flood insurance policy to discuss the need for protection with their insurance agent."

The NFIP assists Oklahomans by making flood insurance available at affordable rates and helping communities make wise decisions concerning floodplain use. To be eligible for flood insurance, participants must establish a floodplain board, recognize floodplain boundaries and restrict development in those areas. Such strategies typically result in reduced federal outlays to mitigate flood damages. The OWRB is the state agency designated to coordinate the NFIP in Oklahoma in a cooperative partnership with the Oklahoma Insurance Commission, Oklahoma Department of Civil Emergency Management and the Oklahoma Floodplain Managers Association.

Less than 13 percent of all homes or structures in the state that lie in the 100-year floodplain are covered by flood insurance, according to Ken Morris, OWRB state floodplain management coordinator. "It is disheartening that relatively few people have taken advantage of the benefits afforded through the purchase of flood insurance, especially since it is so inexpensive and offers such comprehensive protection against one of our most common natural disasters," Morris said, adding that in the last decade, severe flooding episodes have occurred in Oklahoma about every two years.

Similarly, Flood Awareness Month, in May, will provide an opportunity for the OWRB to remind Oklahomans of the numerous dangers posed by flooding -- especially the hazards of driving into flooded roadways -- and of the various flood safety procedures required to protect their lives and livelihoods. Historically, the greatest number of flood disasters in Oklahoma have occurred during the month of May.

"More people drown in their cars than anywhere else," Morris pointed out. "Currents can be deceptive; just several inches of moving water can pick up or even overturn a vehicle. We really want to stress the potential dangers of not heeding road barriers or driving into flooded roadways."

For more information on the NFIP and flood protection and mitigation procedures, contact Ken Morris, of the OWRB's Planning and Management Division, at 405/530-8840.



Flood Awareness Month, May 2001, provides an opportunity for the OWRB and other state organizations to educate Oklahomans about numerous flooding dangers, including driving into flooded roadways.

Water Resources Update

Reservoir Storage

Reservoir storage levels in Oklahoma remain good throughout most of the state. As of March 26, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 99.4 percent full, the same as this time last month (February 26), according to information from the [U.S. Army Corps of Engineers \(Tulsa District\)](#). However, 27 reservoirs - including all in the Central, East Central, South Central and Southeast region -- have experienced lake level decreases since that time. Still, only six reservoirs are operating at less than full capacity (compared to five last month). Two reservoirs (Lugert-Altus and Tom Steed) remain below 80 percent capacity.

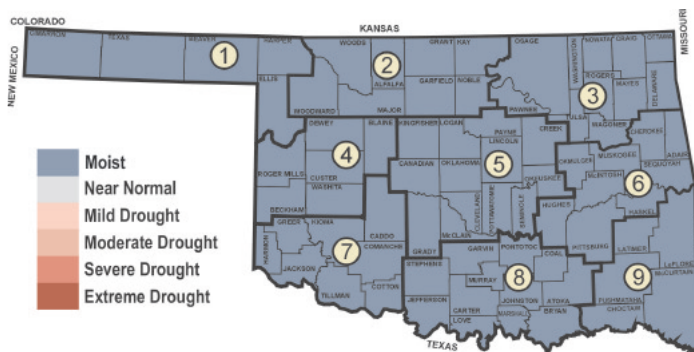
Storage in Selected Oklahoma Lakes & Reservoirs

As of March 26, 2001

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage	
			Conservation	Flood
NORTH CENTRAL	433,032	433,032	100.0	3.67
NORTHEAST	3,484,317	3,467,550	99.5	0.84
WEST CENTRAL	276,790	276,323	99.8	0.21
CENTRAL	154,225	154,225	100.0	0.73
EAST CENTRAL	3,022,323	3,022,323	100.0	0.71
SOUTHWEST	301,810	250,338	82.9	0.00
SOUTH CENTRAL	2,795,156	2,795,156	100.0	4.29
SOUTHEAST	1,496,206	1,496,206	100.0	6.44
STATE TOTALS	11,963,859	11,895,153	99.4	2.32

Drought Indices

According to the latest [Palmer Drought Severity Index](#) (March 24, below), moisture/drought conditions remain good, although the PDSI is beginning to indicate a drying trend throughout much of Oklahoma. Eight of the state's nine climate divisions have undergone PDSI moisture decreases since February 24; the East Central climate division ("unusually moist") experienced the greatest decrease during the period. The "driest" region is currently the Northeast ("moist").



The latest monthly [Standardized Precipitation Index](#) (through February, below) indicates that no climate divisions in Oklahoma are experiencing long-term dryness (among the selected time periods: 3-, 6-, 9- and 12-month). In addition, no regions are experiencing dryness over various time spans within the past six years.

Palmer Drought Severity Index

Climate Division (#)	Current Status 3/24/2001	Value		Change In Value
		3/24	2/24	
NORTHWEST (1)	VERY MOIST SPELL	3.70	3.11	0.59
NORTH CENTRAL (2)	VERY MOIST SPELL	3.68	4.19	-0.51
NORTHEAST (3)	MOIST SPELL	1.83	2.54	-0.71
WEST CENTRAL (4)	UNUSUAL MOIST SPELL	2.93	3.14	-0.21
CENTRAL (5)	VERY MOIST SPELL	3.14	4.00	-0.86
EAST CENTRAL (6)	UNUSUAL MOIST SPELL	2.45	3.64	-1.19
SOUTHWEST (7)	VERY MOIST SPELL	3.40	3.87	-0.47
SOUTH CENTRAL (8)	VERY MOIST SPELL	3.74	4.35	-0.61
SOUTHEAST (9)	UNUSUAL MOIST SPELL	2.99	3.47	-0.48

Standardized Precipitation Index

Through February, 2001

	3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	MODERATELY WET	VERY WET	NEAR NORMAL	MODERATELY WET
NORTH CENTRAL (2)	VERY WET	MODERATELY WET	NEAR NORMAL	MODERATELY WET
NORTHEAST (3)	VERY WET	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
WEST CENTRAL (4)	VERY WET	MODERATELY WET	NEAR NORMAL	MODERATELY WET
CENTRAL (5)	VERY WET	VERY WET	VERY WET	MODERATELY WET
EAST CENTRAL (6)	VERY WET	VERY WET	VERY WET	MODERATELY WET
SOUTHWEST (7)	MODERATELY WET	VERY WET	VERY WET	VERY WET
SOUTH CENTRAL (8)	VERY WET	VERY WET	VERY WET	MODERATELY WET
SOUTHEAST (9)	VERY WET	VERY WET	VERY WET	MODERATELY WET

Financial Assistance Program Update

Approved at the March 13, 2001 Board Meeting

			Financial Assistance Program Update	
FAP Loans			Totals as of 3/13/2001	
03/13/21	1 Blackwell MA, Kay County	\$2,975,000.00		
	2 Grand Lake PWA, Delaware County	575,000.00		
	3 Rural Water District #5, Hughes County	575,000.00		
CWSRF Loans			FAP Loans	
03/13/01	1 Grand Lake PWA, Delaware County	\$2,466,988.57	#Approved	234
	2 Sand Springs MA, Tulsa County	6,167,095.00	Amount	\$349,185,000.00
	3 Stillwater Utility Authority, Payne County	20,735,000.00		
DWSRF Loans			CWSRF	
03/13/01	1 Mangum Utility Authority, Greer County	\$2,400,000.00	#Approved	108
	Hardship Grants - None	0	Amount	\$381,896,356.30
Emergency Grants			DWSRF	
03/13/01	1 Mangum Utility Authority, Greer County	\$100,000.00	#Approved	13
	2 Purcell PWA, McClain County	100,000.00	Amount	\$34,532,504.90
	3 Rural Water District #5, Hughes County	100,000.00		
Reap Grants			Hardship Grants	
03/13/01	1 Town of Union City, Canadian County	\$99,000.00	#Approved	2
	2 Medicine Park PWA, Comanche County	99,064.00	Amount	\$1,038,752.30
	3 Hanna PWA, McIntosh County	99,900.00		
	4 Ramona PWA, Washington County	109,000.00		
	5 Valliant PWA, McCurtain County	75,350.00		
	6 Morrison PWA, Noble County	141,563.00		
			Emergency Grants	
			#Approved	468
			Amount	\$27,363,033.26
			REAP Grants	
			#Approved	274
			Amount	\$22,619,210.18

OKLAHOMA Water News

Bimonthly Newsletter of the

Oklahoma Water Resources Board

3800 N. Classen Boulevard

Oklahoma City, OK 73118

Phone 405-530-8800 Fax 405-530-8900

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Richard McDonald, Bill Secrest, Dick Seybolt, Ervin Mitchell, Wendell Thomasson, Harry Currie

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OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

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BUMP Summer Sampling in Full Swing

**WATER RESOURCES UPDATE:
Reservoir Storage
Drought Update**

Financial Assistance Program Update

From the Director



*Duane A. Smith
Executive Director*

As the State Legislature formally adjourns for the year, I am again encouraged by the spirit of cooperation between the Water Board and legislative members that has culminated in another successful session. Our appropriations bill will be funded at a level that ensures the OWRB's continued excellent service to the citizens of Oklahoma.

In particular, the Legislature has again renewed their confidence in our Beneficial Use Monitoring Program, created in 1998, with a \$1.2 million dollar appropriation, a 20 percent increase from last year. The program, a vital component of the state's water quality management effort, has so far resulted in the evaluation and assessment of some 4,500 stream miles and 573,000 lake surface acres throughout Oklahoma. The additional funds will allow us to initiate a pilot project of biological assessments and integrate the collection of streamflow data along with water quality samples.

See Director, Page 2

Board Asks Court to Enforce Knight Lake Order Repairs

At its May meeting, the nine-member Water Board voted to seek relief in Oklahoma County District Court to compel repair of dilapidated Knight Lake dam, in Oklahoma City. To date, owners of the deteriorated structure have failed to comply



Knight Lake's crumbling spillway is indicative of numerous deficiencies in the west Oklahoma City dam.

with an April 10 order to initiate repairs, including immediate lowering of the impoundment as a safety precaution, or complete removal of the dam. Owners include Oklahoma County --

See Knight Lake, Page 6

Grandstaff Elected Board Chairman

Grady Grandstaff, of Newcastle, was elected Chairman of the Water Board at the OWRB's annual election of officers in June. Grandstaff is co-owner and operator of an independent energy production company and wholesale grocery distribution firm. A member of the Oklahoma County Election Board, he serves as vice chair of the Fifth Congressional District Republican Party and is past chairman of the Oklahoma County Republican Party.



*Grady Grandstaff,
Chairman, OWRB*

"I'm pleased to have this opportunity to serve the Board and State of Oklahoma in this capacity. I look forward to the coming year," Grandstaff said. He was appointed to the Board by Governor Frank Keating in 1997 and represents the Fifth Congressional District and industry interests.

Also at the June meeting, Ervin Mitchell (Balko) was elected Secretary and Richard Sevenoaks (Tulsa) was re-elected Vice Chairman.

Aside from BUMP funding, a \$250,000 agency appropriation, especially supported by Gov. Keating, will fund various agency duties related to water planning and drought preparedness. We also received funding to participate with the Corps of Engineers in studies related to an offstream storage site on the Barren Fork River and potential construction of Mangum Reservoir. We remain hopeful that, during the special session in September, the Legislature will identify fiscal year 2002 funding for the state's innovative weather modification program, directed by the OWRB. We continue to support implementation of a multi-year research program to determine the effectiveness and applicability of cloud seeding technology in mitigating severe weather events, especially hail damage, and as a drought/water resource management tool.

A final look at some of the most significant legislation pertinent to our duties at the Water Board begins with House Bill 1480, which concerns the waste by pollution issue. Specifically, HB 1480 precludes the OWRB from making waste by pollution determinations on groundwater use applications related to activities under jurisdiction of the Department of Agriculture and/or Department of Environmental Quality. Although this measure appears to limit OWRB involvement in the waste by pollution matter, ODA, DEQ and this agency will continue to work in close partnership to ensure that any proposed or ongoing water use activity is conducted in a manner that sufficiently protects the waters of the state. A related bill, HB 1237, which sought to clarify Board efforts in determining sites applied to the state's three-mile setback requirement, was vetoed by Gov. Keating. The legislation would have established five factors for the OWRB to consider in determining whether a facility is a camp or recreation site.

The Governor also vetoed SB 627, creating the Credible Data Act. The bill would have established guidelines for all state environmental agencies when collecting and analyzing water quality and related data beyond the extent already required by our Use Support Assessment Protocol Rules. In particular, SB 627 would have impacted decisions related to the addition and removal of waterbodies from the Clean Water Act 303(d) list of state waters whose beneficial uses are currently impaired.

Through Senate Concurrent Resolution 18, the OWRB is directed to pursue U.S. Supreme Court action against the State of Texas for violating terms of the Canadian River Compact. As you know, Texas' development of Palo Duro

Reservoir (on Palo Duro Creek, a tributary of the Beaver-North Canadian River) in 1991, approximately 12 miles upstream from the Texas/Oklahoma state line, precludes water releases sufficient to satisfy Oklahoma's apportionment under terms of the 51-year-old Compact. Of specific concern are reduced flows for Canton Lake, a primary source of water for Oklahoma City on the North Canadian River, which could be further impacted by a second proposed reservoir on a separate tributary of the North Canadian in Texas. Following 10 years of talks to resolve this issue and after exhausting all possible remedies, I believe the State of Oklahoma is compelled to take this legal action.

In conclusion, HCR 1008 directs the OWRB to initiate dialogue with the states of Nebraska, Colorado, Kansas, New Mexico and Texas, as well as appropriate federal agencies, regarding formation of a High Plains Ogallala Aquifer Compact. This Compact would represent a first-ever interstate agreement to preserve this vitally important, shared groundwater resource.

Over the coming weeks and months, the Water Board's Management Team will mull over action taken during the recent legislative session and plan our course of action for this next fiscal year. Concurrently, we will also revisit the OWRB's Strategic Plan and adjust, as necessary, our tasks and deadlines to reflect ever-evolving agency goals.

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State Hosts Cloud Seeding Conference

Cloud seeding professionals from across the world provided unique perspectives on the technology's present and future status, as the OWRB and Oklahoma Weather Modification Advisory Board hosted the annual meeting of the Weather Modification Association (WMA) on April 26-27. The event was held at the Westin Hotel in Oklahoma City.

Although the conference included customary updates on many of the more than 100 cloud seeding programs currently underway throughout the world, including 24 countries, discussion centered around recent trends in weather modification and what is required to establish the technology as a long-range water management and weather damage mitigation tool.



Roelof Brintjes, National Center for Atmospheric Research

According to Roelof Brintjes, outgoing WMA president and a lead researcher with the National Center for Atmospheric Research, recent improvements in seeding techniques, remote sensing, radar capabilities, weather forecasting and related factors have resulted in encouraging results from ongoing programs in Thailand, South Africa, Argentina and, especially, Mexico. In Mexico, a three-year randomized experiment duplicated results from the South African project half-way around the world – a first in the history of weather modification research.

“Recent observational and technological advancements have greatly enhanced our ability to understand cloud microphysics and the complex processes involved in the development of clouds and storm systems,” Dr. Brintjes said. “Still, continued research is needed to more clearly demonstrate weather modification technology and improve its effectiveness.” He added that Oklahoma, due to its often robust atmospheric conditions and proximity to incomparable weather research facilities, could be an ideal location for a multi-year research program. OWRB and Advisory Board officials, supported by Congressman J.C. Watts, are cur-

rently pursuing several state and federal funding sources to finance the ambitious project.

Conferees at the WMA meeting were also addressed by Oklahoma Insurance Commissioner Carol Fisher, a vocal advocate of weather modification and its involvement with the state's insurance industry. At the conclusion of the meeting, interested participants visited the National Severe Storms Laboratory, at the University of Oklahoma, and Oklahoma cloud seeding facilities at Sundance Airpark, in west Oklahoma City.

WMA was organized in 1950 to foster improved understanding of weather modification techniques, impacts, and expectations among program sponsors, program operators and the scientific community, as well as to promote ethical, professional conduct and the free exchange of ideas and information.

State Weather Modification Activities Suspended

Effective June 14, the Oklahoma Weather Modification Program has been suspended due to insufficient funds. However, the Legislature plans to study the program and investigate potential funding for cloud seeding activities through an interim study this summer.

The 2001 program, initiated on March 1, was slated to continue operations uninterrupted through October 31.

U.S. Weather Modification Programs



Oklahoma Resident Relates Flood Experience

The following personal narration is from Jack Carden, past resident of Josseyville, just south of Apache in Caddo County. Mr. Carden and his neighbors were inundated by at least seven feet of floodwaters on October 23, 2000. Fortunately, no deaths or major injuries were reported as a result of this destructive flood.

Sure, we all know about floods. Some water gets in your home, everything at ground level gets wet, and probably some mud is left behind. Unfortunately, what most of us also “know” about flooding is that it happens to someone else. Don’t hide behind these “safe” generalizations... because floods can be much more.

I was asleep -- a deep, sound sleep. Well, maybe not so sound because some noise kept tugging at me. Tiredness would push it away and I would fall back into sleep. But, time after time, the dreamlike interruptions came back. Was it real or imagined? I ignored it, I was tired.

Like an alarm clock you’ve tried to sleep through, the noise finally registered and I shot up in bed. It had been raining hard for hours and that noise was the sound of water, gurgling, like maybe the roof leaking. I jumped out of bed and, to my complete confusion, I was in cold, dark water. When I hit the light, it certainly wasn’t a leak -- my house was over a foot high in water.

I yanked on a pair of shorts and a t-shirt as I yelled at the family -- evidently quite urgently as my wife, 15-year-old son and 13-year-old daughter were up as I went running for the garage to turn off the breakers (I heard this might save the appliances) and to get some boots on so I could gather up the valuables.

Across the wet house I ran. I pushed on the garage door and it was stuck. Thinking a broom or such was

blocking it, I gave a stout shove. Urgency turned to panic -- I realized the problem was that the water was much higher outside than inside. That gurgling noise that woke me -- it was water finding its way inside.

I wheeled. I yelled at the family “out NOW.” I grabbed my keys as I ran to the front door, barking instructions on the way... I don’t really remember checking heads in the dark, but I do recall telling them to watch out because the door opened inward towards us. The wall of water jerked the door out of my hand, knocked my girl down, and swept away the pants my son was trying to pull on. Things were happening quickly as we left home without even time for shoes nor pants for my son. We had to go.

Well, yes we made it. ...immediately the sadness overtook my wife and daughter. Pictures are all that remain of deceased fathers and grandfathers -- my father that the kids never got to meet. We can’t take anymore pictures of our boy’s first fish or our little girl’s precious baby face. And what about all those video tapes of our children?

...I refuse to be sad - we got the four most important things out already. I told them there will be tough days ahead, plenty of heartache, work and certainly financial worries, but we will simply have to be up to it.

I will always remember the inside of my home some 10 hours later as I got my first look. Nothing was safe. Water nearly seven feet high inside my house violently scattered and battered everything. What wasn’t broken or destroyed by water was eventually ruined by the thick mud or the mildew that set in... Fences, sheds, shop, pump house, and everything outside [was] gone.

A life’s work, a family’s needs, a father’s anguish. I had flood insurance, but that doesn’t pay for the fences, the pool, the pump house, etc. But worse, it does not cover buying a new lot and building, a new house, because common sense as well as floodplain management codes dictate not to rebuild in nature’s path. Insurance pays for the cost of repair only.

And so, time to turn to programs that we have always figured were for other people -- and the communities and their officials that administer the various programs and support. My neighbors nor I are looking for handouts. I realize and caution others to recognize that no one did this to us - it isn’t anyone’s fault. And I must confess, it is with shame that I determine that this time it is my family who will need the help.

I promised myself I would not be bitter. I promised God I would remain thankful for my family’s safety. I promised my family we would be “up to the Task.” These three things I will do. But I will also hope for the others that will someday endure the work and loss and hardship of another Oklahoma flood - I will hope that their town, county and officials have taken ownership and are ready to help when they are needed.

Breakfast Feast Recognizes OWRB Staff



Employees “belly up to the breakfast bar” to enjoy various delicacies prepared by Water Board management in observance of Public Service Recognition Week May 7-13. The morning event was held prior to the agency’s monthly staff meeting on May 7.

Northeast Oklahoma Students Honored For Water Quality Monitoring Efforts

On April 24, the Oklahoma State Legislature recognized students and teachers from Kansas Middle School for their outstanding water quality monitoring work at Eucha Lake and the surrounding vicinity.

Rep. Larry Adair and Sen. Rick Littlefield presented an Oklahoma Water Watch (OWW) Program Recognition Award to the group during a formal ceremony held at the State Capitol. The award, recognizing one year of volunteer service with OWW, consists of a metal sign that stakes claim to the water quality monitoring area for which they are responsible – in this case, Eucha Lake.

Other groups who have received similar awards for their work are the Grand Lake Association and Comanche High School (for their monitoring efforts at Waurika Lake). The Water Watch Program is coordinated by the Oklahoma Water Resources Board.

“We’re so impressed by the responsibility and dedication exhibited by these fine young people and their teachers,” said Rep. Adair. “Their efforts renew my faith in the leaders of tomorrow.”

Sen. Littlefield echoed those sentiments. “Considering the scope and nature of water quality concerns in the Eucha Lake watershed, it’s comforting to know that we have concerned citizens, young and old alike, who are so willing to donate their time to the betterment of the northeast Oklahoma community.”

Following the ceremony, the two legislators formally introduced the group to those present in the State Capitol chambers during the ongoing legislative session.

The Kansas Middle School team originally consisted of approximately 25 students and two teachers from the small southern Delaware County school, although 15 additional volunteers have since undergone training and joined the effort. The group monitors three sites in the Eucha/Spavinaw watershed, testing for basic parameters (air/water temperature, dissolved oxygen, pH, lake clarity and water color) and recording general site observations.



Angie Verbeck, Kansas Middle School teacher and coordinator of the KMS Oklahoma Water Watch organization, receives the OWRB's recognition award, on behalf of the school, from Sen. Rick Littlefield, Rep. Larry Adair, Speaker of the House, and Rep. Joe Hutchison at the State Capitol April 24.



An aerial view of construction on Montgomery Point Lock and Dam. (Photo courtesy Arkansas Basin Development Association, Inc.)

Montgomery Point Construction On Track

Despite recent setbacks due to damaging winter weather and structural/material problems, construction continues on Montgomery Point Lock and Dam, on the McClellan-Kerr Arkansas River Navigation System in Arkansas.

The \$186 million project, scheduled for completion sometime next year, will alleviate periodic low-water problems in the system's White River Entrance Channel and reduce dredging needs by more than 90 percent.

Knight Lake . . . Continued

which acquired Knight Lake when the previous owner quit paying taxes -- and two apartment complexes adjoining the lake area.

“We are pursuing all necessary legal action to gain compliance with the Board’s order and prevent potential damage which could result in failure of the dam,” said Dean Couch, the water board’s general counsel. Couch filed the lawsuit against the owners in late May.

Knight Lake dam, which impounds approximately 42 acre-feet of water adjoining an apartment complex and neighborhood in west Oklahoma City, consists of an earthen structure 15 feet high and 300 feet long. According to OWRB dam inspections, the embankment has settled and eroded to such an extent that a heavy rain event could easily cause failure. In places, the crest of the dam has eroded to one-half its original width. The crumbling concrete emergency spillway, appurtenant to the 40-year-old structure, contains a 60-square-foot hole created by flowing water. Other deficiencies identified during inspections include seepage through the bottom of the dam that has created a permanent wetland; deep pedestrian and bike trails cut into the face of the dam and a utility pole mounted on the dam’s shoulder; and trees, bushes and other vegetation, potential conduits for erosion, which are common on the dam and spillway.

“The cumulative effect of these conditions causes the dam to be unsafe,” said Cecil Bearden, Water Board dam safety engineer, who conducted and supervised many of the Knight Lake dam inspections. While imminent collapse of the dam is unlikely, the Board’s

order recognized that its deficiencies “impermissibly increase the risk” of failure, Bearden pointed out.

In its April 10 mandate, the Board ordered the owners of Knight Lake to lower the water level to five feet below the crest of the emergency spillway by April 30 and maintain that depth until or unless an application for alteration and repair of the dam and spillway is approved. The OWRB also asked that plans and specifications for necessary work to repair or remove the dam be filed by June 29 and that completion of the improvements be made within a reasonable time. Cost of the repairs have been estimated at approximately \$70,000.

Knight Lake dam is classified as “high” hazard, a designation assigned to structures that impound water upstream of inhabited residences or businesses. High hazard dams require inspection every year. According to Bearden, inspections conducted during the 1990’s noted maintenance deficiencies that apparently were disregarded by previous owners.

Bearden testified at the Board’s March hearing that failure of the dam could cause loss of life. He also testified that failure would likely result in extensive property and economic loss, including flooding of an apartment complex approximately 1,000 feet downstream.

After the OWRB filed its lawsuit, Oklahoma County filed an appeal of the agency’s April order contending that state law exempts them from civil liability on the Knight Lake dam safety issue. A 1999 state statute exempts counties from civil liability from environmental conditions on lands the county acquires for failure to pay taxes.

BUMP Summer

Sampling in Full Swing

Michelle Scheuler and Crystal McLaren, of the OWRB’s Water Quality Programs Division, obtain water samples from Spring Creek (a tributary of the



Grand/Neosho River, near Murphy) in early June. Later, McLaren samples from a bridge spanning the Elk River (just across the state

line in Missouri), a tributary of Grand Lake. Data collected from these field studies will be utilized by the Board’s Beneficial Use Monitoring Program (BUMP), a comprehensive state water quality monitoring effort that seeks to document beneficial use impairments in state waters, identify impairment sources, detect water quality trends, contribute required information for use in the Oklahoma Water Quality Standards and facilitate the prioritization of state pollution control activities.



Water Resources Update

Reservoir Storage

Reservoir storage in Oklahoma has improved substantially during the past few weeks and remains good throughout the state. As of May 21, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 99.1 percent full, a 1.8 percent increase from that recorded on May 1, according to information from the U.S. Army Corps of Engineers (Tulsa District). No reservoirs have experienced lake level decreases since that time (except for Texoma and Broken Bow, where levels were raised to accommodate seasonal pool operations). Only five reservoirs are operating at less than full capacity (compared to 14 in early May); no reservoirs are below 80 percent capacity.

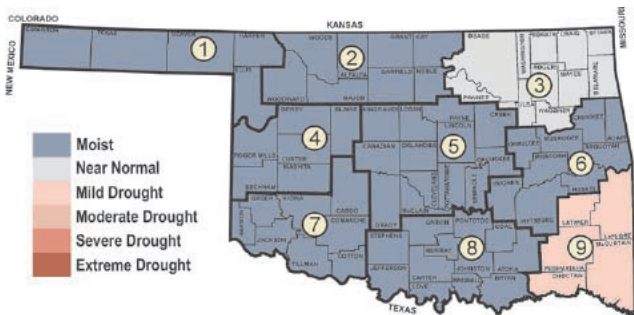
Storage in Selected Oklahoma Lakes & Reservoirs

As of May 21, 2001

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage	
			Conservation	Flood
NORTH CENTRAL	451,860	451,860	100.0	2.24
NORTHEAST	3,484,317	3,435,771	98.6	3.28
WEST CENTRAL	276,790	276,790	100.0	4.07
CENTRAL	154,225	154,225	100.0	2.47
EAST CENTRAL	3,022,323	2,983,919	98.7	0.37
SOUTHWEST	301,810	297,985	98.7	27.69
SOUTH CENTRAL	3,005,444	3,005,444	100.0	5.97
SOUTHEAST	1,556,519	1,536,904	98.7	4.45
STATE TOTALS	12,253,288	12,142,898	99.1	5.86

Drought Indices

According to the latest Palmer Drought Severity Index (June 23, below), drought conditions are arising in some areas of Oklahoma, especially in the east. Seven of Oklahoma's nine climate divisions have undergone PDSI moisture increases since May 19; the South Central ("near normal") and Southwest ("moist spell") climate divisions experienced the greatest decreases during the period. While the Southeast region is the only region currently experiencing drought conditions ("mild drought"), the Northeast and East Central climate divisions are both in the "incipient drought" category.



The latest monthly Standardized Precipitation Index (through May, below) indicates that no climate divisions are experiencing long-term dryness among the selected time periods (3-, 6-, 9- and 12-month SPI's). The same is true among all other monthly time steps throughout the last six years, as all regions report normal or wet conditions.

Palmer Drought Severity Index

Climate Division (#)	Current Status 6/23/2001	Value		Change In Value
		6/23	5/19	
NORTHWEST (1)	VERY MOIST SPELL	3.29	3.71	-0.42
NORTH CENTRAL (2)	MOIST SPELL	1.60	2.10	-0.50
NORTHEAST (3)	INCIPIENT DROUGHT	-0.99	-1.12	0.13
WEST CENTRAL (4)	MOIST SPELL	1.76	3.20	-1.44
CENTRAL (5)	NEAR NORMAL	-0.14	0.88	-1.02
EAST CENTRAL (6)	INCIPIENT DROUGHT	-0.82	-1.39	0.57
SOUTHWEST (7)	MOIST SPELL	1.12	3.39	-2.27
SOUTH CENTRAL (8)	NEAR NORMAL	-0.33	2.04	-2.37
SOUTHEAST (9)	MILD DROUGHT	-1.16	-0.92	-0.24

Standardized Precipitation Index

Through May, 2001

	3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	MODERATELY WET	VERY WET	VERY WET	MODERATELY WET
NORTH CENTRAL (2)	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NORTHEAST (3)	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
WEST CENTRAL (4)	MODERATELY WET	MODERATELY WET	VERY WET	MODERATELY WET
CENTRAL (5)	NEAR NORMAL	NEAR NORMAL	MODERATELY WET	MODERATELY WET
EAST CENTRAL (6)	NEAR NORMAL	NEAR NORMAL	MODERATELY WET	MODERATELY WET
SOUTHWEST (7)	NEAR NORMAL	MODERATELY WET	VERY WET	VERY WET
SOUTH CENTRAL (8)	NEAR NORMAL	MODERATELY WET	VERY WET	MODERATELY WET
SOUTHEAST (9)	NEAR NORMAL	VERY WET	MODERATELY WET	MODERATELY WET

Financial Assistance Program Update

Approved at the April 10 & May 8, 2001 Board Meetings

			Financial Assistance Program Update	
			<i>Totals as of 5/8/2001</i>	
FAP Loans				
05/08/01	1 Durant City Utilities Authority, Bryan County	\$1,805,000.00	#Approved	236
	2 Owasso Public Works Authority, Tulsa County	1,810,000.00		
	3 Owasso Public Works Authority, Tulsa County	1,005,000.00		
	4 Perry Municipal Authority, Noble County	11,025,000.00		
	5 Rural Water District #2, Comanche County	1,045,000.00		
CWSRF Loans				
05/08/01	1 Foyil Economic Development Authority, Rogers County	\$269,520.00	Amount	\$359,010,000
	2 Glenpool Utility Services Authority, Tulsa County	1,361,388.45		
	3 Owasso Public Works Authority, Tulsa County	1,032,440.00		
DWSRF Loans				
05/08/01	1 Altus Municipal Authority, Jackson County	\$10,615,000.00	#Approved	109
	2 Bartlesville Municipal Authority, Washington County	2,150,000.00		
Hardship Grants - None				
0				
Emergency Grants				
04/10/01	1 Town of Nash, Grant County	\$39,209.65	#Approved	2
	2 Milo-Woodford RWS&SWMD, Carter County	100,000.00		
	3 Rural Water District #4, Okmulgee County	54,357.50		
05/08/01	1 Foyil Economic Development Authority, Rogers County	100,000.00	Amount	\$1,038,752.30
Reap Grants				
04/10/01	1 Town of Jennings, Pawnee County	\$90,790.83	#Approved	472
	2 Rural Water District #8, Wagoner County	39,900.00		
	3 Kiefer Public Works Authority, Creek County	150,000.00		
	4 Rural Water District #2, Choctaw County	49,820.00		
	5 Town of Lehigh, Coal County	149,999.00		
	6 Olustee Public Works Authority, Jackson County	59,500.00		
05/08/01	1 Rural Water District #4, Payne County	59,990.00	Amount	\$27,656,600.41
	2 Foyil Economic Development Authority, Rogers County	94,540.00		
	3 Leedey Public Works Authority, Dewey County	99,999.00		
REAP Grants				
			#Approved	282
			Amount	\$23,357,598.01

OKLAHOMA Water News

Bimonthly Newsletter of the

Oklahoma Water Resources Board

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Oklahoma City, OK 73118

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JULY - AUGUST 2001

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OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board



*Duane A. Smith
Executive Director*

From the Director

So quickly, it seems, summer is behind us. And what a busy summer it has been. As many of you know, much of my time recently has been expended dealing with the countless issues related to continuing development of the State/Tribal Water Compact and investigation of associated water/economic development opportunities in southeast Oklahoma.

The Choctaw and Chickasaw Tribes and Governor's Office, with technical assistance from OWRB staff, continue to make substantial progress in developing a draft Water Compact. Governor Keating and other involved state officials have been extremely encouraged by the willingness of the Tribes to address State of Oklahoma water rights and water quality administration concerns within the boundaries of the two Tribal Nations and develop a fair agreement that satisfies all involved parties. This unique agreement will not only facilitate the administration of water rights in the Compact area, but

See Director, Page 2

OWRB Fronts Record Bond Issue

A startling increase in demand has prompted the OWRB to negotiate issuance of a record \$110 million in revenue bonds to fund required water and wastewater project improvements throughout Oklahoma. The bond issue closing occurred in September.

"This is a tremendously significant event, not only in the financing community but for the citizens of Oklahoma who depend so much on clean and dependable water for their homes," explained Joe Freeman, Chief of the OWRB's Financial Assistance Division. The OWRB's previous record bond sale was \$109 million in 1994.

The nine-member Water Board approved the revenue bond issue at its July meeting.

"Normally, our loan program requires \$50 to \$75 million in bonds every two years. However, recent drought episodes and related water shortages have really pointed out the many deficiencies which exist in Oklahoma's water/wastewater infrastructure, especially in rural areas," Freeman said. He added that the agency's current assessment indicates a need

See Bond Issue, Page 2

OWRB Extends Sardis Water System Agreement

The OWRB has approved an extension to a previous agreement with the U.S. Army Corps of Engineers that will allow the Sardis Lake Water Authority to use 500 acre-feet of water from Sardis Lake for its much-needed water system.



Sardis Dam

"This agreement effectively removes any legal impediment to the use of Sardis water by customers of Sardis Lake Water Authority. In addition, it clears the way for future expansion of the system to outlying areas also in need,"

See Sardis Agreement, Page 3

sanction water/wastewater financing and other economic development, establish joint environmental programs and place both parties in a stronger position to secure federal dollars for the economic and social benefit of southeast Oklahoma citizens. I believe the OWRB's role as technical advisor in this process has been particularly valuable during these deliberations and specific discussions on various complicated topics related to surface water resources in the southeast. We hope to have a draft Compact available for public review sometime in November.

Many misconceptions and outlandish rumors continue to proliferate around our discussions with the Choctaw and Chickasaw Tribes and water suppliers in the Oklahoma City and north Texas areas. One allegation is that potential revenues from development would not be used to benefit southern/southeast citizens. That is not only blatantly false, but it goes against the very heart of this effort – maximizing economic development in southeast Oklahoma.

In response to other claims:

- ◆ both the Compact and potential water marketing proposal(s) will be made available for public review and must be approved by the Oklahoma State Legislature;
- ◆ the state will not support the construction of dams that

would cause flooding of lowlands and related adverse impacts to local landowners, endangered species or related environmental resources;

- ◆ measures to protect Oklahomans in the event of a drought will be integral to any interstate or intrastate water marketing/transfer agreement;
- ◆ the rights of Oklahomans to use state waters will not be superseded by downstream dependency or related factors; and
- ◆ there are absolutely no plans (and no economic incentive) to market groundwater.

In an attempt to address these rumors, I will continue to meet regularly with various organizations and individuals in southeast Oklahoma who are generally opposed to local water development. The Water Board has also stepped up efforts with the Corps of Engineers to complete the first stage of a multi-year study that will provide invaluable information on available water resources in southeast Oklahoma. The initial focus of the investigation is the potential utilization of available flows below Hugo Lake and releases from Broken Bow Lake, downstream of the Mountain Fork River trout fishery. Preliminary results from this detailed study should be available before the end of the year.

Bond Issue Continued from page 1

of at least \$102 million in assistance to Oklahoma's water supply and wastewater collection and treatment systems.

Freeman is also pleased, though not necessarily surprised, that Standard and Poor's assigned its 'AA' long-term program rating to the OWRB's 2001 revenue bond series.

"This high rating reflects the maturity of our loan program, which has a good history of borrower repayment, it's strong financial management and oversight, and sound underwriting standards. In fact, the primary reason we didn't receive a higher rating is due to the open nature of the pool — that is, loans are not committed until after the bond issuance, making the overall credit quality of the actual borrowers uncertain at the time of issuance," he pointed out.

The Statewide Water Development Revolving Fund, the cornerstone of the agency's Financial Assistance Program (FAP), was created by the State Legislature in 1979 through an initial \$25 million investment. From that seed money and subsequent development of additional funding programs, the Water Board has initiated more than \$736 million in state water and wastewater system improvements. The extreme popularity of the program is due, in part, to extended payoff periods of up to 30 years at extremely competitive low-interest rates.

The OWRB has also approved 474 emergency grants for almost \$28 million through interest garnered from the Revolving Fund. The Board's entire financial assistance portfolio — also including the Clean Water and Drinking Water State Revolving Fund (SRF) loan programs and Rural Economic Action Plan (REAP) grants — was responsible for 75 percent of all water/wastewater infrastructure project financing in the State of Oklahoma last year.



The OWRB's loan and grant programs were responsible for 75 percent of all state water and wastewater infrastructure financing in 2000. The Town of Marshall's new water tower (shown here in stark contrast to the old structure) was enabled through a \$92,965 OWRB REAP grant as well as local funds contributed by both Marshall and the Association of Central Oklahoma Governments (ACOG).

Sardis Agreement Continued from page 1

declared Duane A. Smith, OWRB Executive Director.

Board approval of the August meeting agenda item extends an Interlocutory Agreement between the Corps and State of Oklahoma originally granted by the nine-member Water Board in October 2000. The accord was signed by Governor Keating and new Corps of Engineers Tulsa District Chief, Colonel Robert L. Suthard, in late August.

“Since the initial agreement, the Authority opened bids for the project and determined the amount of additional funding required. However, due to federal budget restraints, there has been a delay in securing federal financing for the project,” Smith said. As a result, the original one-year arrangement, scheduled to expire in September, will be extended.

The Interlocutory Agreement is required to free up Sardis Lake water for SLWA in light of the federal lawsuit pending between the State of Oklahoma and federal government concerning construction cost obligations. The Corps claims that Oklahoma is approximately \$7.7 million behind in annual Sardis water storage payments and users are prohibited from using water from the lake until payments are brought up to date.

“The original agreement contained a provision that the Authority’s financing had to close by September 1, 2001, or the agreement becomes null and void ‘unless extended,’” Smith said. “When the Authority’s financing was delayed, we pressed for the extension and the Corps was gracious enough to comply.”

The extended agreement will also enable the Board to provide a previously-approved \$122,397 Rural Economic Action Plan (REAP) grant to SLWA to acquire that water supply for the Authority. “There are many citizens who live within a stone’s throw of Sardis Lake who, because they lack a water delivery system, are forced to use bottled water, rely on inadequate wells or, in some cases, haul water to their homes from area springs. That is totally unacceptable in this day and age, although I believe we’re seeing a light at the end of the tunnel,” Smith pointed out.

Recent assertions by the Southern Oklahoma Water Alliance, a citizens activist group, that the OWRB has impeded funding essential to construction of the Sardis Lake Water Authority system are completely unfounded, according to Smith. In an August 7 public statement, the organization declared “Citizens around Sardis Lake have been ‘punished’ by [the] OWRB for opposing the sale of Sardis Lake water to Texas over 20 years ago.”

“That statement couldn’t be further from the truth. Water Board staff, myself included, have expended hundreds of hours drafting contracts and agreements, attending meetings, travelling around the state — even to Washington, D.C. — all to push the local project forward. This has been a very complicated and time-consuming process for all involved in trying to get water to people in the Sardis Lake area,” he said. As evidenced by the Interlocutory Agreement, Smith added, the agency has also gone to great lengths to ensure that the ongoing dispute between the state and federal government does not im-

pair construction of the SLWA system.

“We’ve also facilitated this effort by serving as a liaison between SLWA members and the Corps of Engineers in obtaining the numerous required federal easements and licenses that will allow access to federal land for establishment of system water lines and related facilities. With the easement and storage issues resolved, we’re very close to finally breaking ground on this essential rural water system,” Smith said.

“I think it is also important to emphasize that establishment of the Sardis Lake water system, as well as future expansion of the system, has never been — and never will be — impacted by potential development of water resources in the Kiamichi River Basin, including potential marketing provisions. Sardis Lake and the citizens who will utilize it for water supply remain fully protected, both now and in the future,” he pointed out.

Smith explained that the initial financing package put together by Rural Development (formerly Farmers Home Administration) in 1992 was for a total of \$3.7 million, with about half of that grant money and the other half a loan. “That estimated amount was based on the first project design. However, several design changes were proposed later and now preliminary engineering estimates indicate that the system will require more than twice that amount,” he said. Complicating the issue, RD recently stated that its current year funding pool contains insufficient monies to finance the system and FY-2002 funds for the agency will be required to begin project construction. The current estimated cost to construct SLWA, resulting from the recent bid process, is more than \$9.4 million. The high price tag is primarily a result of the water system’s relatively large service area and rugged topography.

“Once the additional funds are in hand, hopefully in November or December, Rural Development will close its financing with Sardis Lake Water Authority. Then bids can be awarded and construction can finally get underway,” Smith said.

The OWRB administers, or co-administers, several very successful loan and grant programs generally available to new, expanding or troubled water systems. Smith pointed out that through those programs, the agency has awarded almost \$52 million in water and wastewater system improvements within the 22-county area of southeast Oklahoma, including more than \$2 million in the Sardis Lake region encompassed by Pushmataha and Latimer Counties. “However, under the rules and requirements of our financial assistance program, we have very limited loan funds available for new system construction, such as the Sardis Lake Water Authority project. Unfortunately, those projects do not qualify under the laws regulating our grant program,” he added. The maximum OWRB grant amount is \$100,000 per project.

Smith emphasized that the Water Board will continue to provide whatever assistance it can to the Authority. “The people around Sardis Lake have gone too long without the water system they so desperately need.”

Ogallala Yield Hearings on Tap

The OWRB has scheduled two public hearings, October 15 and 16, to discuss and determine groundwater production from the Ogallala Aquifer in northwest Oklahoma and the Panhandle. The October 15 hearing will be held in Guymon at the Texas County Fairgrounds Activity Center, 5th and Sunset. The October 16 hearing will be held in Woodward at Northwestern Electric Inc., 2925 Williams Avenue. Both events will begin at 7:00 p.m.

A maximum annual yield study, conducted by the Water Board last year, resulted in a tentative determination that the annual amount of fresh groundwater which may be safely withdrawn from the northwest Oklahoma region of the Ogallala – i.e., in portions of Dewey, Ellis, Harper and Woodward Counties – is 1.4 acre-foot per acre of land. The tentative 1.4 acre-foot allocation, if the order becomes final, would supplant the current, temporary amount of 2 acre-feet per acre of land.

The tentative order under consideration at the Guymon hearing, specifically for the Panhandle counties of Beaver, Texas and Cimarron, contemplates a regular permit allowance of 2 acre-feet – identical to the existing, regular amount for Texas County (established in 1985) and the current, temporary allocation for Cimarron and Beaver Counties.

“Tentative determinations for each region were arrived

at through detailed, comprehensive investigations of the hydrogeology and water-yielding characteristics in those specific areas of the formation. In addition, a complex groundwater flow model was developed, in cooperation with the U.S. Geological Survey, to support the study,” said Duane Smith, OWRB Executive Director. The Oklahoma Groundwater Law requires the OWRB to determine maximum annual yields for all state groundwater basins. Smith welcomes input from the public at the hearings where any interested party may present evidence or comment in response to, support of, or in opposition to the Board’s tentative findings.

“After we obtain evidence from the public and final determinations have been made, existing temporary permits will lapse and regular permits will be issued for the determined amount,” Smith stated. He added that a water well spacing requirement of 1,320 feet will be applicable for water wells drilled after the final maximum annual yield determination is made.

Smith also emphasized that the maximum annual yield determination will not affect OWRB-recognized “prior rights” to use groundwater. Prior rights are groundwater rights established by the Oklahoma Groundwater Law prior to July 1, 1973.

Register Now for the November 14 Governor’s Water Conference

The 22nd Annual Oklahoma Governor’s Water Conference, entitled “Water – The Key to Oklahoma’s Future,” will be held November 14 at the Myriad Convention Center/Renaissance Hotel in Oklahoma City.

The featured speaker will be Texas Senator Buster Brown, the author of ground-breaking, regional water planning legislation for Texas. Other state and national speakers will address pertinent water quality issues; development of the State/Tribal Water Compact and potential water marketing proposals; the future of water/wastewater financing in Oklahoma; navigation; the proliferation of state power plants; and other topical water subjects. Lead-

ership in the State Legislature, Senator Cal Hobson and Rep. Larry Adair, will provide the legislative outlook and members of Oklahoma’s Congressional Delegation will contribute their viewpoints from Washington, D.C.

Coordinators and sponsors of the Governor’s Water Conference urge prospective attendees to register for the meeting as soon as possible. To register, fill out the form below and send it with your check, money order or purchase order to the OWRB or call 405-530-8800 to submit your registration by phone. Watch the next issue of the *Oklahoma Water News* for more information on Conference speakers, subjects and room rates.

Clip and Mail to:

Governor’s Water Conference
3800 N. Classen Boulevard
Oklahoma City, OK 73118

Please enclose **\$40** check, money order or purchase order payable to:
Oklahoma Water Resources Board
No refunds after November 7.

Call **405-530-8800** or e-mail:
mnbrueggen@owrb.state.ok.us for
more information.

Governor’s Water Conference Registration

Name _____

Organization _____

Address _____

City _____ State _____

Zip _____ Phone () _____

Remember! ***Don't Drive Into*** ***Floodwaters***

As we enter the fall flooding season, please remember the **EXTREME DANGER posed by driving into floodwaters.**

Cooperation Focus of Joint Conference

The Oklahoma Floodplain Managers Association and Oklahoma Emergency Managers Association will host their joint annual fall conference September 24-26 at the Southern Hills Hilton in Tulsa, 7902 South Lewis Avenue. The conference theme is "Working Together for Oklahoma."

General sessions will be held Monday and Wednesday, concluding with the OWRB's "Floodplain Management 101" short-course and administration of the state Certified Floodplain Managers exam to pre-approved candidates. Concurrent discussion and training sessions on Tuesday will focus on advanced stormwater management, basic floodplain management and various emergency management issues.

Registration costs \$150 and includes conference materials, social, awards dinner and business breakfast; there is a \$20 discount for OFMA members. The conference room rate is \$55 and may be obtained by calling (918) 492-5000. To register, call Carolyn Shultz at (918) 669-4919.

Melton Honored as Employee of the Quarter

Michael R. Melton, OWRB Assistant to the Director, was honored in July as the agency's Employee of the Quarter. According to OWRB Executive Director, Duane Smith, Melton has exhibited great skill and diplomacy in promoting and defending the OWRB's Legislative agenda and mission in managing and protecting the water resources of Oklahoma, as well as in building a positive working relationship with the State Legislature and other federal, state and local government agencies.



Mike Melton accepts the OWRB Employee of the Quarter Award at the agency's July staff meeting. Melton has served the Water Board and citizens of Oklahoma for 29 years.

Known for his good nature and sense of humor throughout his 29 years of service to the state, Melton has also assisted in the coordination of 21 Governor's Water Conferences, held each year to promote and discuss critical water issues.

Welcome
OKLAHOMA WATER RESOURCES BOARD

Visit the OWRB web site at www.state.ok.us/~owrb

OWRB Staff Join in "Water Primer"

OWRB Director Duane Smith updates attendees on the Southeast Oklahoma Water Resources Development Plan and State/Tribal Water Compact at the August 23 "Water Primer for Governments, a special conference hosted by the Oklahoma Municipal League at Oklahoma City's Omniplex. Also addressing the audience were Mike Mathis, Joe Freeman and Derek Smithee, Chiefs of the OWRB's Planning and Development, Financial Assistance and Water Quality Divisions, respectively.



OWRB Appoints Well Drillers Council

Eight individuals have been appointed to the new Water Well Drillers and Pump Installers Advisory Council, established last year by the State Legislature. Members were confirmed at the OWRB's August meeting.

According to Mike Mathis, Chief of the OWRB's Planning and Management Division, the Advisory Council organization replaces the informal, ad hoc Well Drillers Committee.

"The Well Drillers Committee was comprised entirely of volunteers, but the Well Drillers Council members are officially appointed by the Board. I think by 'formalizing' this organization we provide the necessary leadership to ensure proper well construction and prevent potential groundwater contamination," Mathis pointed out.

The authorizing legislation — authored by Rep. M.C. Leist, Sen. Frank Shurden and Rep. Jack Bonny — directs the Water Board to appoint Council members. They are selected from among the 1,100 commercial water well drillers and pump installation contractors licensed by the OWRB.

"The Board has selected an extremely diverse and skilled group. Collectively, these representatives account for 112 years of experience in Oklahoma's drilling industry," Mathis said.

The eight Advisory Council members are:

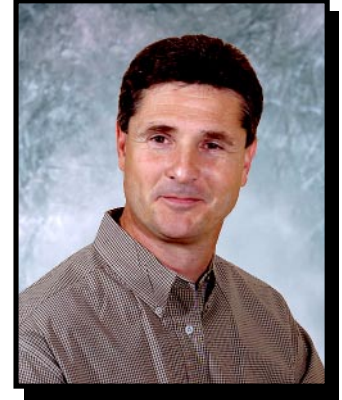
- ◆ Kari Sever, Tryon;
- ◆ Robert Keyes, Norman;
- ◆ Cheryl Cohenour, Tulsa;
- ◆ Danny Ewbank, Fairview;

- ◆ Mike Ritter, Guymon;
- ◆ Dala Bowlin, Inola;
- ◆ Larry Hudgens, Elk City; and
- ◆ Duane Smith, OWRB Executive Director (ex-officio member).

Kent Wilkins, director of the Oklahoma Well Drillers Program, said that Council members are charged with developing rules to comply with standards that govern water well drilling activities in Oklahoma.

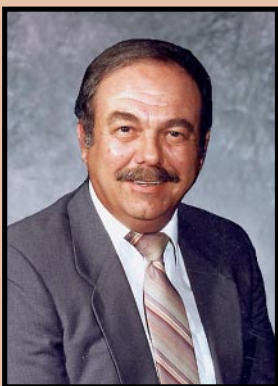
"The most important aspect of these rules is to promote professional well construction and absolutely minimize potential avenues for surface contaminants to pollute the state's invaluable groundwater resources," he emphasized. Also in this regard, Wilkins added, the Council will promote education of the state's drillers and pump contractors through scheduled workshops and related meetings.

The Advisory Council will also direct the expenditure of funds from the Well Drillers and Pump Installers Remedial Indemnity Fund, an account earmarked for remediation of sites contaminated as a result of improper well construction. The Fund is also utilized for inspections, licensing, enforcement and education.



Kent Wilkins

Longtime Drillers' Program Coordinator Retires



Gary Glover

OWRB hydrologist Gary Glover, who served the OWRB and well drillers of Oklahoma for almost three decades, retired in April. He will be replaced in that role by Kent Wilkins, of the Board's McAlester branch office.

Although he was influential in many successful and diverse agency programs, perhaps Glover's most noteworthy role throughout his 27 years at the OWRB was as initial coordinator of the Water Well Drillers and Pump Installers Program. Similarly, as organizer of the state drillers advisory committee, he spearheaded efforts to effect legislation that both validated the importance of the program and its effectiveness in protecting Oklahoma's groundwater quality. His unique and beneficial insight into the state's water well drilling industry was honed through years of field work in the Board's well measurement program.

Previously, as a cartographic draftsman in the OWRB's drafting unit, Glover provided valuable assistance during Phase One of the *Oklahoma Comprehensive Water Plan*, published in 1980. He also served as agency photographer and contributed to numerous publications, including the widely popular *Oklahoma Water Atlas*.

Water Resources Update

Reservoir Storage

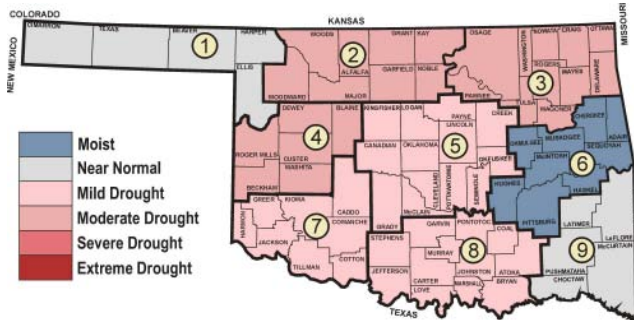
Reservoir storage levels have begun to rebound somewhat in many areas of the state. As of September 12, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 89.7 percent full, a 1.3 percent increase from that recorded on August 28, according to information from the U.S. Army Corps of Engineers (Tulsa District). Nineteen reservoirs have experienced lake level decreases since that time. Twenty-five reservoirs are currently operating at less than full capacity (compared to 29 two weeks ago); five reservoirs (**Lugert-Altus, only 37.1 percent**; Keystone, 65.7 percent; Hulah, 68.6 percent; Great Salt Plains, 74.6 percent; and Canton, 76.4 percent) are below 80 percent capacity.

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage Conservation	Percent of Storage Flood
NORTH CENTRAL	428,325	415,373	97.0	0.00
NORTHEAST	3,484,317	3,167,375	90.9	1.09
WEST CENTRAL	276,790	238,479	86.2	0.00
CENTRAL	154,225	146,701	95.1	0.03
EAST CENTRAL	3,022,323	2,622,816	86.8	0.00
SOUTHWEST	301,810	198,300	65.7	0.00
SOUTH CENTRAL	2,916,476	2,670,864	91.6	0.00
SOUTHEAST	1,512,859	1,388,020	91.7	1.13
STATE TOTALS	12,097,125	10,847,928	89.7	0.50

Drought Indices

According to the latest Palmer Drought Severity Index (September 8, below), drought conditions continue to improve somewhat throughout most of Oklahoma. **However, six regions remain in drought.** The Northeast, North Central and West Central climate divisions are in the “moderate drought” category; the Central, Southwest and South Central regions are in “mild drought.” Only three of Oklahoma’s nine climate divisions have undergone PDSI moisture decreases since August 25; the Northwest (“near normal”) climate division experienced the greatest decrease during the period.

The latest monthly Standardized Precipitation Index (through August, below) indicates that much of Oklahoma is experiencing long-term dryness. Among the *selected* time periods (3-, 6-, 9- and 12-month SPI’s), eight of nine climate divisions (all but the Southeast) report **moderately dry to very dry conditions** throughout the last 3 months; five regions indicate dryness during the past 6 months. The Northeast reports the most consistent dry period of any region throughout the past year.



Palmer Drought Severity Index					Standardized Precipitation Index Through August, 2001			
Climate Division (#)	Current Status 9/8/2001	Value 9/8	Value 8/25	Change In Value	3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	NEAR NORMAL	0.08	1.05	-0.97	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
NORTH CENTRAL (2)	MODERATE DROUGHT	-2.66	-2.38	-0.28	VERY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
NORTHEAST (3)	MODERATE DROUGHT	-2.94	-2.90	-0.04	MODERATELY DRY	VERY DRY	MODERATELY DRY	MODERATELY DRY
WEST CENTRAL (4)	MODERATE DROUGHT	-2.14	-2.32	0.18	VERY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
CENTRAL (5)	MILD DROUGHT	-1.93	-2.46	0.53	MODERATELY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
EAST CENTRAL (6)	INCIPIENT DROUGHT	-0.75	-2.07	1.32	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
SOUTHWEST (7)	MILD DROUGHT	-1.59	-1.64	0.05	VERY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
SOUTH CENTRAL (8)	MILD DROUGHT	-1.21	-2.89	1.68	MODERATELY DRY	VERY DRY	NEAR NORMAL	NEAR NORMAL
SOUTHEAST (9)	NEAR NORMAL	-0.06	-1.97	1.91	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET

Financial Assistance Program Update

Approved at June 12, July 10, and August 14, 2001 Board Meetings

			Financial Assistance Program Update	
			<i>Totals as of 8/14/2001</i>	
FAP Loans				
06/12/01	1 Rural Water District #9, Mayes County	\$1,265,000.00		
	2 Wagoner Public Works Authority, Wagoner County	4,495,000.00		
07/10/01	1 Kingston Municipal Authority, Marshall County	245,000.00		
08/14/01	1 Rural Water District #6, Mayes County	1,310,000.00		
CWSRF Loans				
06/12/01	1 Hobart Public Works Authority, Kiowa County	\$191,000.00		
	2 Prague Public Works Authority, Lincoln County	1,650,000.00		
	3 Rural Sewer District #1, LeFlore County	630,000.00		
07/10/01	1 Owasso Public Works Authority, Tulsa County	2,985,604.00		
08/14/01	1 Collinsville Municipal Authority, Tulsa County	1,215,000.00		
	2 Lawton Water Authority, Comanche County	5,827,307.00		
DWSRF Loans				
06/12/01	1 Cherokee Development Authority, Alfalfa County	\$250,000.00		
	2 Rural Water District #14, LeFlore County	858,750.00		
Hardship Grants - None				
Emergency Grants				
07/10/01	1 Smithville School District, I-14, McCurtain County	\$100,000.00		
08/14/01	1 Hobart Public Works Authority, Kiowa County	11,101.00		
Reap Grants				
06/12/01	1 Town of Cimarron City, Logan County	\$51,933.82		
	2 Manitou Development Authority, Tillman County	105,000.00		
	3 Clayton Public Works Authority, Pushmataha County	99,00.00		
	4 Town of Wakita, Grant County	100,000.00		
	5 Town of Gotebo, Kiowa County	83,730.00		
07/10/01	1 Rural Water District #4, Pawnee County	79,000.00		
	2 Rural Water District #5, Adair County	99,500.00		
	3 Cleo Springs Public Works Authority, Major County	54,275.00		
	4 Town of Tyrone, Texas County	99,999.00		
	5 Town of Allen, Pontotoc County	99,999.00		
	6 Town of Sentinel, Washita County	20,200.00		
			FAP Loans	
			#Approved	240
			Amount	\$363,280,000.00
			CWSRF	
			#Approved	115
			Amount	\$396,471,378.66
			DWSRF	
			#Approved	17
			Amount	\$48,406,254.90
			Hardship Grants	
			#Approved	2
			Amount	\$1,038,752.30
			Emergency Grants	
			#Approved	474
			Amount	\$27,767,701.41
			REAP Grants	
			#Approved	292
			Amount	\$24,229,034.83

OKLAHOMA Water News

Bimonthly Newsletter of the

OKLAHOMA WATER RESOURCES BOARD

3800 N. Classen Boulevard

Oklahoma City, OK 73118

Phone 405-530-8800 Fax 405-530-8900

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**SEPTEMBER-
OCTOBER 2001**

OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

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Drought Update**

Financial Assistance Program Update



*Duane A. Smith
OWRB Executive Director*

From the Director

I encourage all readers of the *Oklahoma Water News* to attend the Annual Governor's Water Conference on November 14. Each year, the Conference provides a unique forum for the discussion of pertinent issues related to water rights, water quality, and the many emerging political and technical developments in the water arena, both in Oklahoma and throughout the nation.

State and national water experts will address a variety of topics, including water marketing, water rights, and potential economic and environmental impacts of statewide water planning. State and Tribal representatives will also be on hand to discuss specifics of the ongoing water compact negotiations between the State and Choctaw and Chickasaw Nations. If those discussions are completed, officials also hope to formally release the draft State/Tribal Water Compact, which will establish a water rights and quality administration system and facilitate a plan for economic development in south-east Oklahoma.

OWRB to Host 22nd Annual Governor's Water Conference

The 22nd Annual Governor's Water Conference, sponsored by the Oklahoma Water Resources Board and 31 other water-related organizations, will be held on November 14, 2001, at the Myriad Convention Center in Oklahoma City. Registration begins at 8:00 a.m. on the 2nd level of the Myriad.

OWRB Chairman Grady Grandstaff will contribute opening remarks at 8:30, followed by a brief address from Oklahoma Governor Frank Keating. The theme of the Conference is "Water—The Key to Oklahoma's Future."

Texas State Senator J.E. "Buster" Brown, the senior ranking Republican member of the Texas State Senate and Chairman of the Senate Natural Resources Commit-

tee, will deliver this year's luncheon address. Senator Brown has authored and/or sponsored 64 bills addressing the implementation and financing of statewide water plans and is the founder and chairman of the Texas Water Foundation, a non-profit organization designed to raise public awareness of water issues. In 2000, Senator Brown co-hosted the first symposium on water financing for the state of Texas. This symposium brought together international, national, and state-wide experts to examine financial requirements related to the planning and creation of reliable water/wastewater infrastructure and programs in Texas. Senator Brown also co-founded the Texas Council on Environmental Technology,



Texas Senator J.E. "Buster" Brown

which examines technological advances the state can utilize in finding solutions to current and future environmental challenges.

Another featured speaker is Roberta Savage, Executive Director of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) in

See Water Conference, Page 2



Roberta Savage, Executive Director of ASIWPCA

Washington, D.C. In 1989, Ms. Savage created America's Clean Water Foundation, a nonprofit organization that serves as a forum for citizen outreach, youth education, and technical program exchange. Part of the Foundation's mission is to build public understanding and rekindle public interest in clean water while promoting personal stewardship of water resources. The National Environmental Dialogue on Pork Production, International Water-

shed Symposium, Global Assembly for Women and the Environment, and The World Water Summit are a few of the Foundation's notable successes.

Other guest speakers include Ted Coombes, President of the Southwest Power Resources Association; Dean Couch, General Counsel for the OWRB; Danny Ewbank, member of the Well Drillers Advisory Council; Robert Johnson, CEO of the National Rural Water Association; Gene Rainbolt, BancFirst Chairman of the Board; Senator Cal Hobson; and Representative Larry Adair.

Duane Smith, Executive Director of OWRB, will address upcoming water planning activities, including the change in focus from state- to locally-driven planning initiatives, as Oklahoma prepares for its 2005 update of the *Oklahoma Comprehensive Water Plan*. The conference will close with presentation of Oklahoma Water Pioneer awards, recognizing the lifetime achievements of outstanding Oklahomans in the planning, development, conservation, and protection of the state's water resources.

For more information, please call the OWRB at 405-530-8800. For advance registration, please complete the registration form below and mail it to the address listed on the form along with your \$40 check, money order, or purchase order.

Sponsoring Organizations for the 22nd Annual Governor's Water Conference

- American Water Resources Association
- American Water Works Association
- ArkansasAmerican Water Resources Association
- American Water Works Association
- Arkansas BasinDevelopment Association
- Association of County Commissioners of Oklahoma
- Association of Oklahoma General Contractors
- Clean Lakes Association
- Environmental Federation of Oklahoma
- Garber-Wellington Association
- Ground Water Protection Council
- League of Women Voters
- Office of the Secretary of Environment
- Oklahoma Aquaculture Association
- Oklahoma Association of Conservation Districts
- Oklahoma Association of Electric Cooperatives
- Oklahoma Department of Transportation—Waterways Branch
- Oklahoma Energy Resources Board
- Oklahoma Farm Bureau
- Oklahoma Farmers Union
- Oklahoma Floodplain Managers Association
- Oklahoma Homebuilders Association
- Oklahoma Municipal Contractors Association
- Oklahoma Municipal League
- Oklahoma Rural Water Association
- Oklahoma State Chamber of Commerce & Industry
- Oklahoma Water and Pollution Control Association
- Oklahoma Waterways Advisory Board
- Oklahoma Wildlife Federation
- Port of Muskogee
- Soil and Water Conservation Society
- Southwestern Power Resources Association
- Tulsa Port of Catoosa

Clip and Mail to:
Governor's Water Conference
3800 N. Classen Boulevard
Oklahoma City, OK 73118

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Oklahoma Water Resources Board
No refunds after November 7.

Call **405-530-8800** or e-mail:
mnbrueggen@owrb.state.ok.us for more information.

Governor's Water Conference Registration

Name _____

Organization _____

Address _____

City _____ State _____

Zip _____ Phone () _____



Judge Issues Injunction Against Johnston County Water Well Driller

Prompted by recent alleged violations, the District Court judge of Johnston County has granted the Oklahoma Water Resources Board a temporary injunction to prevent a local, unlicensed water well driller from unlawfully practicing his trade in the state.

The order against Max Jones, a driller from Mannsville whose license expired in 2000, and his firm, Jones Water Well Drilling, was issued October 5 by the Honorable Judge Robert M. Highsmith. The OWRB sought the injunction — which prevents Jones Drilling from drilling or plugging groundwater wells and test holes, observation wells, and heat exchange wells until such time as the OWRB issues a final administrative order — in response to numerous reports of unlawful and poorly-constructed wells drilled by Jones. The Johnston County District Attorney has also filed misdemeanor charges against Jones, which could result in substantial fines for the operator. An administrative hearing was held for Jones's firm on September 10; formal revocation of his license will be considered by the nine-member Board at its November 13 meeting.

According to Kent Wilkins, Coordinator of the state's Well Drillers Program, violations of minimum construction standards for wells drilled by Jones Drilling were identified by OWRB field inspectors at multiple sites in Johnston, Marshall, and Bryan Counties.

"The observed wells had no cement seal, which is the primary mechanism to prevent contamination of groundwater, an important source of water supply for numerous municipalities and rural water districts in Oklahoma," Wilkins pointed out. "Mr. Jones has also been responsible for numerous unplugged test holes and has drilled and completed at least one well in an underground saltwater formation, another violation of state well construction standards and a potential health hazard to the public."

The OWRB licenses water well drillers in Oklahoma, and in concert with the state's Water Well Advisory Council, sets minimum construction standards that must be followed in the completion of water wells.

"Shoddy or irresponsible well construction in Oklahoma will not be tolerated by the Water Board," emphasized Duane A. Smith, OWRB Executive Director, "and we will pursue all available means to alleviate such problems and prosecute individuals who purposely ignore state regulations intended to protect our vitally important groundwater supplies."

Citizens who have concerns about improper construction of their water wells or related questions are urged to contact the OWRB in Oklahoma City at (405) 530-8800 or the agency's McAlester Field Office at (918) 426-5435.

Did you know . . .

Nearly one half of the world's population lacks access to clean water for sanitation, drinking, and other human needs.

Twelve percent of the Earth's land surface is permanently covered by ice.

There is the same amount of water on Earth today as there was 3 billion years ago--326 million cubic miles covering 71% of the earth.

Evenly distributed, the Earth's annual rainfall could cover every square foot of land to a depth of about three feet.

Three quarters of the weight of a living tree is water.

You could survive about a month without food, but only 5-7 days without water.

An adult body is 65%-70% water.

Six million cubic miles of water locked in the ice caps could feed all the world's rivers for 1000 years.

The Earth's water cycle transfers 10.3 quadrillion gallons from the oceans to the land every year.

Source: America's Clean Water Foundation

FLOOD CURRENT



Training and Certification are Invaluable

W. Kenneth Morris, CFM
State Floodplain Manager, OWRB



Ken Morris

Oklahoma is proud of its 95 Certified Floodplain Managers, all members of the Oklahoma Floodplain Managers Association, who guide and encourage intelligent development along the state's rivers and streams. I can tell you from personal experience that these men and women really know their stuff and their job is a difficult one.

However, concerns remain about the administration of local floodplain management programs by undertrained and unqualified staff in some Oklahoma communities. In this regard, the OWRB provided valuable training of local officials during six separate months last year. Of the 363 communities in Oklahoma that administer flood ordinances, only approximately

150 floodplain administrators attended OWRB-sponsored training opportunities. As a result, less than one-half of officials are likely unaware of recent changes in state and federal regulations and the latest floodplain management procedures. In addition, individuals who missed our training sessions deprived themselves of any opportunity to become certified floodplain managers and the many benefits that designation provides.

The CFM program, a major aspect of community NFIP compliance, enhances the status of professional floodplain managers, raises the awareness of the role of the floodplain manager to citizens and local officials, increases opportunities for training and continuing education, facilitates flood loss reduction, decreases loss of life from flood, and results in the preservation of the many natural and cultural benefits provided by Oklahoma's scenic and valuable floodplain areas.

I urge you to call me at 405-530-880 if you would like more information about the CFM program, or go to <http://www.okflood.org>, the web site of the Oklahoma Floodplain Managers Association.

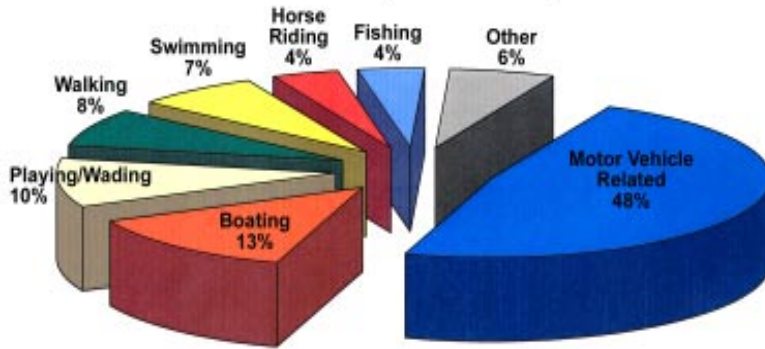
State Receives National Floodplain Management Award

On June 7, 2001, Oklahoma was presented with the Tom Lee State Award of Excellence for the quality of its floodplain management program. The award was presented by the Association of State Floodplain Managers (ASFPM) at the organization's 25th annual conference in Charlotte, North Carolina.

The success of Oklahoma's floodplain management program lies in the quality and extent of the many partnerships developed between state and federal agencies, organizations, businesses, elected representatives, and private citizens. Among recognized programs and publications were the Oklahoma Water Resources Board's annual Spring Flood Campaign, the biannual *Flood Current* newsletter, the state's floodplain permitting program on state-owned and -operated property, the 1999 Guidebook for Local Floodplain Ordinance Administrators, and various publications and videos on the National Flood Insurance Program (NFIP) and hazard mitigation. The award also recognized many of the partnerships and team-building approaches used by the OWRB in its general floodplain management program. Partners in this effort include the Oklahoma Department of Civil Emergency Management, Oklahoma Department of Transportation, University of Oklahoma, Federal Emergency Management Agency, U.S. Army Corps of Engineers, Association of County Commissioners, Oklahoma Municipal League, State Legislature, Oklahoma Emergency Managers Association, and Oklahoma Floodplain Managers Association (OFMA).

The organization also awarded OFMA the first John Ivey Award for Superior Certification Program for establishing the first nationally accredited certified floodplain manager program in the U.S. Although Oklahoma has only two percent of NFIP member communities in the nation, state and local floodplain management activities are directed by 12 percent of all certified, professional floodplain managers in the U.S.

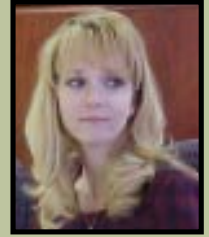
Flood-Related Injuries by Activity Oklahoma (1988-2000)



The risk of flooding and flash floods is high for Oklahomans. Severe storms occurring sporadically during the year, especially in the spring months, along with Oklahoma's clay soils, account for this risk. A total of 75 flood-related or fatal submersion injuries occurred in Oklahoma from 1988-2000; 65 of these were fatal. Motor vehicle flood-related submersions accounted for 36 of the injuries.

Floodplain Manager of the Year

Each year, OFMA selects an individual who has shown significant excellence in the field of floodplain management. This individual has demonstrated dedication through the administration of his or her community's floodplain management program in pursuing the goals of flood loss reduction and in the prevention of loss of life. OFMA is pleased to announce the 2001 recipient of the Floodplain Manager of the Year Award, **Nancy Wade** of Bartlesville.



Training is available for floodplain administrators throughout the year.

For more information, please contact Ken Morris or Rhonda Kouba at (405) 530-8800.

Is Your Floodplain Administrator Up to Speed?

In Oklahoma, 363 communities currently participate in the National Flood Insurance Program (NFIP). Each has adopted a flood hazard prevention ordinance containing a set of regulations to mitigate flood losses and protect the natural floodplain environment.

A floodplain administrator—a mayor, city manager, or appointed individual—is responsible for ensuring that there are no floodplain violations in the community that could lead to probation or suspension from the NFIP. However, frequent turnover in this position often leaves communities with floodplain administrators who have insufficient training, and quite often, they are simply unaware of measures to enforce local ordinances. Here are the most common NFIP violations of Oklahoma communities:

- Failure to Require Permits for Floodplain Development

A permit is required for development that occurs in a special flood hazard area. Development is defined as any manmade change to improved or unimproved real estate, including buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

- Failure to Submit Corporate Limit Changes to FEMA

The Federal Emergency Management Agency (FEMA) must be notified any time a participating community changes its corporate limits.

- Failure to Require Elevation of Structures Built in special flood hazard areas to the Base Flood Elevation

Any residential structure built in a special flood hazard area must be elevated at least to the base flood elevation. (Non-residential structures can be elevated or flood-proofed.)

- Failure to Require "No Rise" Certificates for Structures Located in a Regulatory Floodway

Any structure built or placed in a regulatory floodway is required to have a certificate of "no rise" completed by a certified engineer.

- Failure to Notify the OWRB of a New Floodplain Manager

The OWRB must be notified by letter when a new floodplain administrator is appointed.

OWRB Staff Say “We Care”

Nineteen Water Board employees joined together to actively mark United Way’s Day of Caring on September 7. The group volunteered to paint the inside of Mid-Del Youth and Family Center in Del City. Shelly Bacon and Laura Oak, of the Board’s Financial Assistance Division, coordinated the project. This is the fifth year the OWRB has participated in the event, which promotes long-term volunteerism.



Pictured above are Nathan Kunhert, Angela Thompson, Tony Mensah, Laura Oak, Theda Adkisson, Katera Whitaker, Stephenie Snode, Jalisha Petties, Joyce Boyd, Tiger Feng, Anita Ray, Frank Young, Barry Fogerty, Matt Cogburn, Mike Binck, Jerry Barnett, and Jim Schuelein.



Matt Cogburn



Tony Mensah



Laura Oak



Angela Thompson

Water Resources Update

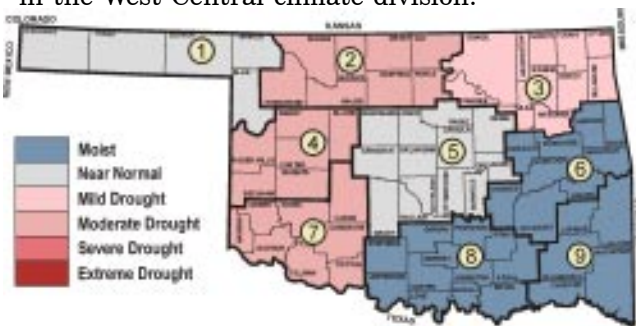
Reservoir Storage

Reservoir storage levels continue to slowly rebound from the summer dry period, although some lakes remain low or very low. As of October 22, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 93.5 percent full, a 1.6 percent increase from that recorded on September 25, according to information from the U.S. Army Corps of Engineers (Tulsa District). Sixteen reservoirs have experienced lake level decreases since that time, including all three in the southwest. Twenty reservoirs are currently operating at less than full capacity (compared to 23 four weeks ago); six reservoirs (**Lugert-Altus, only 36 percent; Hulah, 57.2 percent; Canton, 71.8 percent; Birch, 72.8 percent; Tom Steed, 75.9 percent; and Copan, 79.3 percent**) are below 80 percent capacity.

Storage in Selected Oklahoma Lakes & Reservoirs				
As of October 22, 2001				
Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage	
			Conservation	Flood
NORTH CENTRAL	442,446	437,100	98.8	0.09
NORTHEAST	3,484,317	3,261,895	93.6	0.61
WEST CENTRAL	276,790	229,898	83.1	0.00
CENTRAL	154,225	153,259	99.4	0.16
EAST CENTRAL	2,968,681	2,725,926	91.8	0.00
SOUTHWEST	301,810	189,230	62.7	0.00
SOUTH CENTRAL	3,029,708	2,978,315	98.3	0.30
SOUTHEAST	1,481,575	1,370,305	92.5	1.56
STATE TOTALS	12,139,552	11,345,928	93.5	0.49

Drought Indices

According to the latest Palmer Drought Severity Index (October 20 below), drought conditions linger in several areas of the state and four regions remain in drought. The West Central, Southwest, and North Central climate divisions are in the “moderate drought” category while the Northeast region is in “mild drought.” Four of Oklahoma’s nine climate divisions have undergone PDSI moisture decreases since September 22. The greatest decrease occurred in the West Central climate division.



The latest monthly Standardized Precipitation Index (through September, below) indicates that North Central and Northeast Oklahoma are experiencing long-term dryness. Among the selected time periods (3-, 6-, 9- and 12-month SPIs), those climate divisions report **moderately dry to very dry conditions** throughout the last six to nine months. Among other periods, the 15-month SPI also reports moderately dry conditions in the Northeast, Oklahoma’s most consistently dry region.

Palmer Drought Severity Index					Standardized Precipitation Index			
Climate Division (#)	Current Status 10/20/2001	Value		Change In Value	Through September 2001			
		10/20	9/22		3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	NEAR NORMAL	0.02	0.76	-0.74	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
NORTH CENTRAL (2)	MODERATE DROUGHT	-2.14	-1.70	-0.44	MODERATELY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
NORTHEAST (3)	MILD DROUGHT	-1.96	-2.66	0.70	VERY DRY	VERY DRY	MODERATELY DRY	NEAR NORMAL
WEST CENTRAL (4)	MODERATE DROUGHT	-2.25	-1.39	-0.86	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
CENTRAL (5)	INCIPIENT MOIST SPELL	0.70	-0.32	1.02	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
EAST CENTRAL (6)	MOIST SPELL	1.13	0.05	1.08	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
SOUTHWEST (7)	MODERATE DROUGHT	-2.17	-1.42	-0.75	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET
SOUTH CENTRAL (8)	UNUSUAL MOIST SPELL	2.05	1.62	0.43	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	VERY WET
SOUTHEAST (9)	MOIST SPELL	1.35	0.40	0.95	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY WET

Financial Assistance Program Update

Approved at September 11 and October 9, 2001 Board Meetings

Financial Assistance Program Update		
FAP Loans		
09/11/01	1	Durant City Utilities Authority, Bryan County \$1,585,000.00
10/09/01	1	Arkoma Municipal Authority, LeFlore County \$565,000.00
CWSRF Loans		
09/11/01	1	Cushing Municipal Authority, Payne County \$6,500,000.00
	2	Durant City Utilities Authority, Bryan County \$14,560,000.00
	3	El Reno Municipal Authority, Canadian County \$1,936,409.69
10/09/01	1	Miami Special Utility Authority, Ottawa County \$9,260,000.00
	2	Rural Water District #2, Comanche County \$1,045,000.00
DWSRF Loans		
09/11/01	1	Durant City Utilities Authority, Bryan County \$3,717,000.00
Hardship Grants		
None		
Emergency Grants		
09/11/01	1	Harrah, City of, Oklahoma County \$14,373.50
10/09/01	1	Brooksville Public Works Authority, Pottawatomie County \$57,800.00
	2	Nowata Municipal Authority, Nowata County \$79,000.00
	3	Madill, City of, Marshall County \$100,000.00
	4	Weleetka Public Works Authority, Okfuskee County \$37,400.00
Reap Grants		
None		
Totals as of 10/09/2001		
FAP Loans		
#Approved		243
Amount		\$372,000,000.00
CWSRF		
#Approved		119
Amount		\$428,272,788.35
DWSRF		
#Approved		18
Amount		\$51,823,254.90
Hardship Grants		
#Approved		2
Amount		\$1,038,752.30
Emergency Grants		
#Approved		479
Amount		\$28,056,274.91
REAP Grants		
#Approved		292
Amount		\$24,229,034.83

OKLAHOMA Water News

Bimonthly Newsletter of the

Oklahoma Water Resources Board

3800 N. Classen Boulevard

Oklahoma City, OK 73118

Phone 405-530-8800 Fax 405-530-8900

Grady Grandstaff, *Chairman*; Richard C. Sevenoaks, *Vice Chairman*; Ervin Mitchell, *Secretary*
Lonnie L. Farmer, Richard McDonald, Bill Secrest, Dick Seybolt, Wendell Thomasson, Harry Currie

Brian Vance, *Writer/Editor* • Darla Whitley, *Writer/Layout* • Barry Fogerty, *Photographer* • James Leewright, *Graphics*

NOVEMBER-
DECEMBER 2001

OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

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**Financial Assistance Program
Update**



*Duane A. Smith
OWRB Executive Director*

From the Director

As recapped in the article below, the 2001 Governor's Water Conference was highlighted by release of the State/Tribal Water Compact. I commend Governor Keating, Chief of Staff Howard Barnett, Choctaw Chief Greg Pyle, and Chickasaw Governor Bill Anoatubby on their collective efforts and spirit of cooperation in completing the draft phase of this historic agreement by the November deadline.

The ongoing public review process now takes center stage in preparation for submittal of the Water Compact to the full Oklahoma State Legislature in February. While much has been accomplished, a great deal of work still remains to maximize the potential economic benefits of southeast Oklahoma's water resources. In the near future, public meetings will be held to address individual components of the draft Compact and receive

See From the Director, Page 2

Compact Released at Water Conference

A draft compact enabling the State and the Choctaw and Chickasaw Nations to cooperatively administer water rights in southeastern Oklahoma was released to the public at the 22nd Annual Governor's Water Conference on November 14. After public input has been considered, a final draft of the ground-breaking settlement will be presented to the Oklahoma Legislature in February 2002.

Governor Keating's Chief of Staff, Howard Barnett, spoke to Conference attendees and members of the press about the purpose of the State/Tribal Water Compact (see summary on page 4), emphasizing that should a separate contract for the sale of water be negotiated, all profits would be split 50/50 between the State of Oklahoma and the Chickasaw and Choctaw Nations. Additionally, he said, all State revenues would be reinvested in economic development within the 22 counties encompassed by the two tribal regions.

"Restrictions on any water sale contract include the right to stop or limit the transfer of water during times of drought in Oklahoma," Barnett pointed out. "And, most importantly, the citizens of southeast Oklahoma



Duane Smith, Governor Bill Anoatubby, Chief Greg Pyle, and Howard Barnett meet with the press.

and Oklahoma at large would receive first priority to those available water resources."

Following comments during the Conference's morning session by Barnett, OWRB Executive Director Duane Smith, Governor Bill Anoatubby of the Chickasaw Nation, and Chief Gregory Pyle of the Choctaw Nation of Oklahoma, a brief press conference was held during which the principle players in Compact negotiations answered more specific questions about the Compact and potential water sale to Texas.

From the Director . . . Continued from page 1



Conference speakers included (top to bottom) Gene Rainbolt, Chairman of the Board of BancFirst; Roberta Savage, Executive Director of ASIWPCA; Representative Larry Adair, Speaker of the Oklahoma House of Representatives; and OWRB's General Counsel, Dean Couch.

input for possible revisions.

At this year's Water Conference, our speakers once again contributed varied and insightful viewpoints on water rights, water quality, project financing, and other emerging issues in the water arena. I want to personally thank these individuals for their vital contributions to the continued success of this landmark event. I also thank our 31 sponsors and more than 400 attendees. I hope to see you all again next year.

Finally, I want to take this opportunity to encourage all water rights holders and others with an interest in how Oklahoma waters are managed to attend one of six informal meetings to be held throughout the state in December on proposed amendments to Water Board rules and regulations. This is a great opportunity to have a direct impact on the conservation and protection of our most essential resource. Public hearings will be held on the rules, as well as final amendments to the

At the Conference, Chickasaw Governor Bill Anoatubby (upper right) and Choctaw Chief Gregory Pyle (lower right) express their support for the Compact. Supporters of the Compact from the Choctaw and Chickasaw Tribal Nations stand outside the Myriad among protestors (below).

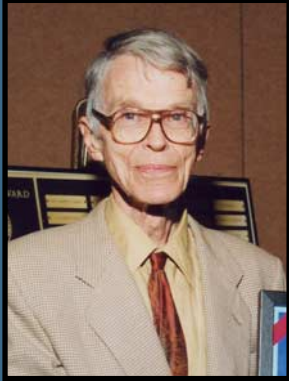


Protestors (below) carry signs in front of the Myriad Convention Center on November 14 proclaiming their opposition to any sale of Oklahoma water to Texas.

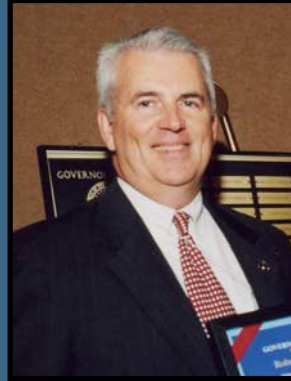


2001 Water Pioneers

Four individuals were recognized as Oklahoma Water Pioneers at the Governor's Water Conference on November 14, 2002, for their extraordinary contributions toward the development, protection, and conservation of Oklahoma's water resources.



Phillip Lorenz, President of Oklahoma's Scenic Rivers Association



Robert Johnson, CEO of the National Rural Water Association (NRWA)



Ken McFall, former Executive Secretary of the Oklahoma Farm Bureau



James Norick, former Mayor of Oklahoma City

Water Board to Hold Statewide Meetings on Proposed Agency Rules

In an effort to gather public input on proposed rules and regulations of the Oklahoma Water Resources Board, the agency will host six public meetings throughout the state in December. The meetings will begin at 7:00 p.m. at the following locations:

- **December 11**—Eastern State College Ballroom, 1301 West Main, Wilburton
- **December 12**—Tulsa City Hall, 200 Civic Center, Suite 1101 (enter on 6th St. west of Denver), Tulsa
- **December 13**—Great Plains Area Vo-Tech, Rm. 301-A, 4500 SW Lee Blvd., Lawton
- **December 17**—Northwestern Electric Cooperative, 2925 Williams Ave., Woodward
- **December 18**—Texas County Activity Center Banquet Room, 5th and Sunset, Guymon
- **December 19**—Oklahoma Water Resources Board, 3800 N. Classen Blvd., Oklahoma City


According to Duane Smith, OWRB Executive Director, public meetings are a valuable component of the agency's rules revision process: "Citizen input is crucial to this process because it has a direct effect on how well we manage and protect Oklahoma's water resources. If we can reach a consensus among the people we work for and with, we avoid conflicts down the road, which makes our job easier."

The proposed rule changes will address several important water management issues, including how pollution is considered in groundwater permit cases and regulation of commercial water well drillers. Other areas under consideration for amendment are potential instream flow protection on eastern Oklahoma's scenic Baron Fork River and revised funding procedures for water and wastewater projects under the Rural Economic Action Plan (REAP) grant and federal Clean Water Act loan programs. The agency is also proposing amendments to the Oklahoma Water Quality Standards and rules for implementation of those Standards.


On February 4, 2002, the OWRB will hold a formal public hearing on proposed revisions to the Oklahoma Water Quality Standards and rules for implementation. A separate public hearing will be held February 6 on the other proposed rules. Following consideration and approval of all revised rules by the nine-member Water Board, the rules will be submitted to the Governor and State Legislature.

Summaries of the proposed rules revisions under discussion will be available at the public meetings and may be obtained by contacting the OWRB at (405) 530-8800. Citizens unable to attend a meeting in their area may also call the OWRB to offer comments. Existing rules are available for review on the agency's Web site at www.owrb.state.ok.us.


Summary of the Draft State/Tribal Water Compact




The Choctaw and Chickasaw Tribal Nations will delegate water rights administration and water quality standards administration to the State of Oklahoma. The OWRB will follow current laws, rules, and procedures for permits and standards. Pursuant to the Clean Water Act, the Tribes may challenge, through arbitration, actions by the State if existing permitting rules are not followed or excessive permitting is proposed or Tribal Sovereignty and self-government is adversely impacted. The Tribes may establish their own water quality standards on Tribal lands. Either party may challenge establishment of water quality standards that adversely impact the other's lands.




Citizens in the basin of origin and in the Compact area will be recognized to have the highest priority for their present and future use of water in the Compact area. Citizens in the State of Oklahoma outside the Compact area will have the next highest priority. All other uses, including those out of state, will have the last priority.




Oklahoma City will agree to pay construction costs of Sardis Reservoir to the U.S. Army Corps of Engineers on behalf of the State of Oklahoma and will reimburse the State for past Sardis payments. Subject to the Compact, Oklahoma City will have an allocation of water from the Kiamichi River Basin/Sardis for its long-term future needs subject to local restrictions and participation with local entities for economic level development.




The Tribal Nations will waive claims to all existing water rights issued by the State, including Oklahoma City's rights to Atoka Lake and McGee Creek Reservoir.




The communities of central Oklahoma and Oklahoma City will be provided opportunities to develop future water supplies from the Kiamichi River Basin consistent with cornerstone principles designed to protect basin resources and future growth.




The Compact **does not and will not** authorize any sale or use of water out of state. The Compact requires that any sale or use of water out of state must be agreed to through a separate contract approved by the Oklahoma State Legislature and Tribal legislative bodies.




The Compact **does not** authorize the sale of groundwater; the same applies to future water marketing agreements.



The agreement creates a Compact Commission with membership consisting of 50 percent state appointees from the Compact area (selected by the Governor and confirmed by the Senate) and 50 percent Tribal appointees.



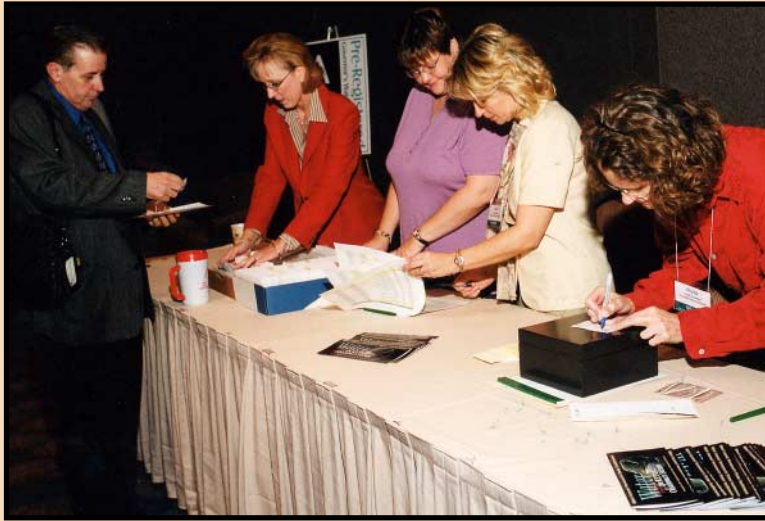
The Compact Commission will have authority to (1) own and operate all infrastructure required to deliver sales of area water, (2) issue bonds to construct infrastructure necessary to deliver water sold from the Compact area to out-of-state entities, (3) administer separate contracts that authorize the out-of-state use of Compact area water, and (4) collect and distribute revenues from water sales from any out-of-state water sales agreements according to the terms of the Compact.



The Compact provides that potential water marketing revenues will be apportioned as follows: 50 percent will go to the State to be distributed in the Compact area by a special development district (public trust) composed of area residents appointed by the Governor and confirmed by the Oklahoma Senate; 37 ½ percent will go the Choctaw Nation to be appropriated by the Choctaw Tribal Council; and 12 ½ percent will go to the Chickasaw Nation to be appropriated by the Chickasaw Legislature.

For complete text of the Compact, please visit the OWRB Web site at www.owrb.state.ok.us

Teamwork and dedication of OWRB staff once again lead to Conference success.



OWRB staff members, Mary Schooley, Kelley Bailes, Carla Jennings, and Phyllis Robertson, work at the registration table.



Featured luncheon speaker Texas Senator J. E. "Buster" Brown and Conference coordinator Mike Melton



OWRB's Mike Binck at the FAD booth



OWRB's Mike Sughru assisting with Duane Smith's slide presentation



OWRB's Brian Vance with Grady Grandstaff, Chairman of the Board and 2001 Conference host

OWRB's Paul Hodge with REAP recipients from Kiowa County



OWRB's Jim Schuelein with Kathy Peter, USGS District Chief

Annual Chili Cookoff and Costume Contest Benefit United Way

Once again, the generosity and support of Water Board staff resulted in a very successful United Way Campaign. Primarily due to the hard work of coordinators Shelly Bacon and Laura Oak, a total of \$7767.14 was raised this year.

The fundraising effort was highlighted by the annual chili cookoff on October 31. This year's winner of the coveted traveling skillet was Andy Scurlock of Information Services. Second place went to Julie Cunningham, and third to Mike Binck and Katera Whitaker.

Graciously serving as judges were Rep. Clay Pope, Rep. Randall Erwin, JeanWitt (Assistant to Rep. Erwin), Amanda Storck (Office of State Finance), Ron Meister (Senate staff), and Stephen Weiss (House staff).

Halloween costume contest winners were Little Red Riding Hood and the Big Bad Wolf (a.k.a. Whitaker and Binck).



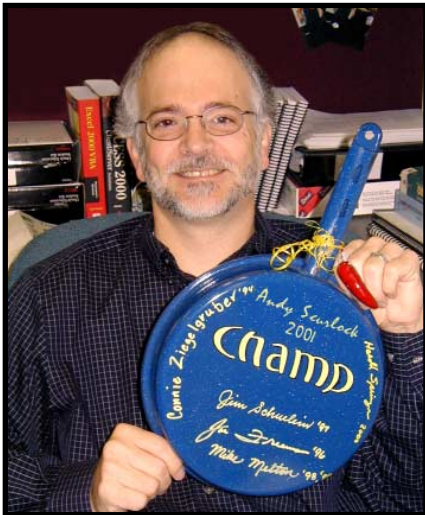
OWRB staff and guests in line for chili



Duane Smith with costume contest winners, Katera Whitaker and Mike Binck



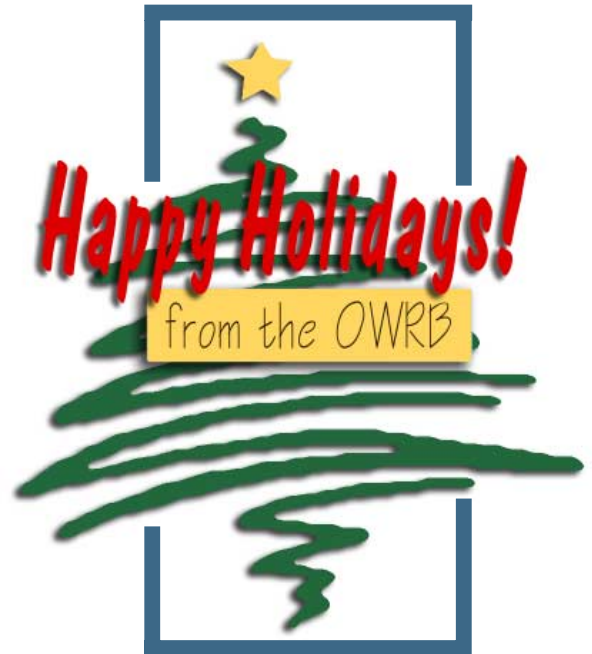
Representative Clay Pope



Andy Scurlock, 2001 chili champ



Representative Randall Erwin



Visit the OWRB web site at
www.owrb.state.ok.us

Water Resources Update

Reservoir Storage

Following a recent rebound, reservoir storage levels have begun to drop in many areas of the state. As of November 20, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 90.7 percent full, a 2.8 percent decrease from that recorded on October 22, according to information from the U.S. Army Corps of Engineers (Tulsa District). Twenty-three reservoirs have experienced lake level decreases since that time, including all nine in the east central, southwest, and south central regions. Twenty-two reservoirs are currently operating at less than full capacity (compared to 20 four weeks ago); seven reservoirs (Lugert-Altus, only 35.7 percent; Hulah, 47.8 percent; Canton, 71.8 percent; Keystone, 73.8 percent; Tom Steed, 74.1 percent; Birch, 74.9 percent; and Copan, 75.9 percent) are below 80 percent capacity.

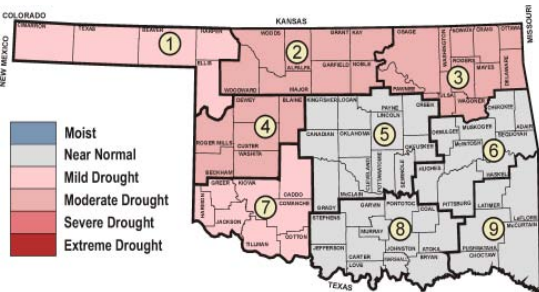
Storage in Selected Oklahoma Lakes & Reservoirs

As of November 20, 2001

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage	
			Conservation	Flood
NORTH CENTRAL	451,860	446,192	98.7	0.35
NORTHEAST	3,484,317	3,195,677	91.7	0.23
WEST CENTRAL	276,790	229,078	82.8	0.00
CENTRAL	154,225	151,333	98.1	0.16
EAST CENTRAL	2,968,681	2,561,940	86.3	0.00
SOUTHWEST	301,810	186,853	61.9	0.00
SOUTH CENTRAL	3,078,236	2,946,757	95.7	0.21
SOUTHEAST	1,494,465	1,358,731	90.9	0.31
STATE TOTALS	12,210,384	11,076,561	90.7	0.19

Drought Indices

According to the latest Palmer Drought Severity Index (December 1, below), many areas of Oklahoma remain dry and in need of moisture. The North Central, Northeast, and West Central climate divisions are classified in the “moderate drought” category while the Northwest and Southwest regions are in “mild drought.” Seven of Oklahoma’s nine climate divisions have undergone PDSI moisture decreases since November 17. The greatest decrease occurred in the Northwest climate division.



The latest monthly Standardized Precipitation Index (through November, below) indicates that several regions, especially the North Central area (which indicates “extremely dry” conditions over the last 6-month period), are experiencing long-term dryness. Among the *selected* time periods (3-, 6-, 9- and 12-month SPI’s), the Northeast, Northwest, West Central, and Southwest climate divisions report moderately dry to very dry conditions throughout at least the last six to nine months. Among periods beyond one year, only the 15-month SPI (Northeast, moderately dry) reports dry conditions for any area of Oklahoma.

Palmer Drought Severity Index

Standardized Precipitation Index

Through November 2001

Climate Division (#)	Current Status 12/01/2001	Value			3-Month	6-Month	9-Month	12-Month
		12/1	11/17	In Value				
NORTHWEST (1)	MILD DROUGHT	-1.65	-1.34	-0.31	NEAR NORMAL	VERY DRY	MODERATELY DRY	NEAR NORMAL
NORTH CENTRAL (2)	MODERATE DROUGHT	-2.74	-2.56	-0.18	MODERATELY DRY	EXTREMELY DRY	VERY DRY	MODERATELY DRY
NORTHEAST (3)	MODERATE DROUGHT	-2.56	-2.31	-0.25	NEAR NORMAL	VERY DRY	VERY DRY	MODERATELY DRY
WEST CENTRAL (4)	MODERATE DROUGHT	-2.42	-2.27	-0.15	NEAR NORMAL	VERY DRY	MODERATELY DRY	NEAR NORMAL
CENTRAL (5)	NEAR NORMAL	-0.30	-0.10	-0.20	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
EAST CENTRAL (6)	NEAR NORMAL	0.32	-0.17	0.49	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
SOUTHWEST (7)	MILD DROUGHT	-1.51	-1.84	0.33	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY	NEAR NORMAL
SOUTH CENTRAL (8)	NEAR NORMAL	0.48	0.60	-0.12	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
SOUTHEAST (9)	NEAR NORMAL	0.21	0.25	-0.04	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL

Financial Assistance Program Update

Approved at November 13 and December 11, 2001, Board Meetings

Financial Assistance Program Update		
<i>Totals as of 12/11/2001</i>		
FAP Loans		
11/13/01	West Siloam Springs MA, Delaware County	\$275,000
11/13/01	RWD #2, Wagoner County	\$775,000
12/11/01	RWD #5, Stephens County	\$430,000
12/11/01	RWD #5, Wagoner County	\$2,310,000
CWSRF		
12/11/01	Westville UA, Adair County	\$380,400
	Broken Arrow MA, Tulsa County	\$1,011,954
DWSRF		
11/13/01	Edmond PWA, Oklahoma County	\$10,743,486
Hardship Grants		
None		
Emergency Grants		
12/11/01	RW&SD #5, Garfield County	\$75,000
12/11/01	RWSG&SWMD #14, Pittsburg County	\$38,250
REAP Grants		
11/13/01	Chattanooga PWA, Comanche County	\$94,660
11/13/01	Tipton PWA, Tillman County	\$99,675
11/13/01	RWD #5, Seminole County	\$99,770
11/13/01	Gore PWA, Sequoyah County	\$60,000
11/13/01	Bluejacket PWA, Craig County	\$79,700
11/13/01	RWD #1, Delaware County	\$50,000
11/13/01	Burbank PWA, Osage County	\$87,538
11/13/01	RWSG & SWMD #3, Choctaw County	\$58,500
11/13/01	RWD #9, McCurtain County	\$99,995
11/13/01	RWD #4, Garfield County	\$110,000
11/13/01	RWD #1, Woodward County	\$99,999
11/13/01	Achille PUA, Bryan County	\$99,999
11/13/01	Town of Francis, Pontotoc County	\$62,150
11/13/01	RWD #3, Beckham County	\$84,100
11/13/01	Cheyenne UA, Roger Mills County	\$25,000
12/11/01	RWD #14, Muskogee County	\$150,000
12/11/01	Bernice PWA, Delaware County	\$99,500
12/11/01	City of Lehigh, Coal County	\$149,999
Financial Assistance Program Update		
<i>Totals as of 12/11/2001</i>		
FAP Loans		
#Approved		247
Amount		\$375,790,000
CWSRF		
#Approved		121
Amount		\$429,665,142
DWSRF		
#Approved		19
Amount		\$62,566,741
Hardship Grants		
#Approved		2
Amount		\$1,038,752
Emergency Grants		
#Approved		481
Amount		\$28,169,525
REAP Grants		
#Approved		310
Amount		\$25,839,620

OKLAHOMA Water News

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