

OKLAHOMA Water News

1st Quarter 2010

Inside

EPA Regional Administrator and State Leaders Praise Oklahoma's Stimulus Program

EPA Figures Confirm State Pollution Control Efforts

Arbuckle Study Final Report Released

OSE Launches New Website

EPA's National Lakes Assessment

Flood Insurance Critical for Oklahomans

Enhanced BUMP Report Makes Data More Accessible

OCWP Update

Historical Water Use Report Now Available

Drought Update

EPA Regional Administrator and State Leaders Praise Oklahoma's Stimulus Program

During Oklahoma's Water Appreciation Day at the State Capitol on February 9, Dr. Al Armendariz, the newly-appointed Regional Administrator of the Environmental Protection Agency (EPA), joined state legislative and appointed officials in recognizing the substantial work accomplished by state agencies and communities in implementing federal stimulus water and wastewater projects.



Armendariz contributed remarks during a brief ceremony in the House Chamber, which was hosted by Rudy Herrmann, Chairman of the OWRB, and J.D. Strong, Oklahoma Secretary of Environment and OWRB Interim Executive Director.

"We are proud of what Oklahoma has been able to do under the American Recovery and Reinvestment Act," said Armendariz. "When the Act provided an opportunity to preserve and create jobs, and invest in critical environmental areas like water infrastructure, Oklahoma seized that opportunity. It was one of the first states in the country to qualify for and to spend their money on needed projects—to clean polluted waters and to improve drinking water. We congratulate the State of Oklahoma for their hard work, taking full advantage of all that the Recovery Act could provide for the people and environment of Oklahoma."

Dr. Armendariz and others specifically recognized OWRB and Department of Environmental Quality (ODEQ) staff for their dedication in administering more than \$63 million in federal stimulus funding in less than a year's time.

(continued on page 3)

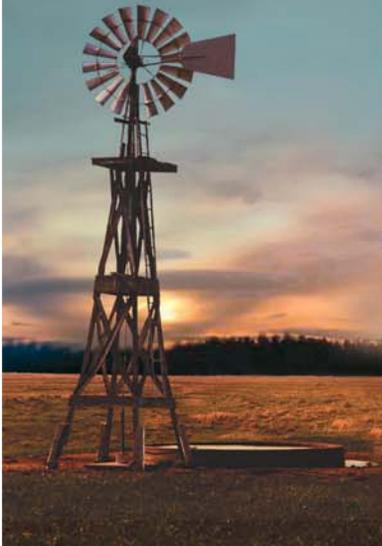
From the Director

As most Oklahomans in the water business know by now, Duane Smith has taken a temporary leave of absence from the OWRB to assist the U.S. military in establishing much-needed water supply and related infrastructure for the citizens of Afghanistan. Without question, Duane's exemplary leadership as the agency's director, as well as his persistence in promoting and implementing Oklahoma Comprehensive Water Plan initiatives, will be missed while he's away.

In Duane's absence, I can assure you that very little will change during my assignment as the OWRB's Interim Executive Director. In fact, I view this opportunity to manage the OWRB's day-to-day surface and groundwater



(continued on page 2)
J. D. Strong, Interim Executive Director
Oklahoma Water Resources Board



Leaders Praise Stimulus Program (continued)



Lt. Gov. Jari Askins

"We are the first state in the region to obligate its ARRA funds ahead of schedule and I commend the OWRB, DEQ, and our cities and towns for that significant accomplishment. While the work was difficult and time-consuming, it was well worth the effort in that it benefited not only our state's economy but our environment as well," commented Lt. Gov. Jari Askins.

More than a dozen of the 44 Oklahoma communities that received stimulus funds had representatives in attendance at Water Appreciation Day. The OWRB and its Financial Assistance Program, consisting of five loan and grant offerings, was also recognized for exceeding the \$2 billion funding level since its inception in 1982.

Earlier, the House of Representatives passed a resolution designating February 9, 2010, as "Water Appreciation Day" in Oklahoma. The event presented an opportunity for numerous state agencies and organizations to showcase their respective efforts in managing and protecting the state's water resources.

Also on hand at the Water Day ceremony were Speaker Chris Bengé and Senator David Myers, who expressed their gratification to the many water agencies and communities who work collectively to foster vital infrastructure improvements throughout the state.



House Speaker Chris Bengé

"Water is of such importance to Oklahoma and that is especially evident in the number of water issues that we address each year in the State Legislature. And I don't see that changing anytime soon," said Speaker Bengé.

"Too often, we take our water resources for granted. But there is nothing as important as reliable water supply, especially in rural areas of our state," added Senator Myers.



Sen. David Myers

ODEQ Executive Director Steve Thompson, State Auditor/Inspector Steve Burrage, OWRB Financial Assistance Division Chief Joe Freeman, and OWRB Director of Planning Kyle Arthur also contributed remarks during the event.

Commenting on the success of Oklahoma's ARRA program, Gov. Brad Henry added, "I applaud the hard work of everyone involved in this important process. With the help of these funds, we will advance important water projects

in dozens of communities around the state, improve water quality, and boost economic activity in the process." ♦



The Oklahoma Geological Survey, Bureau of Reclamation, USGS, Oklahoma Rural Water Association, and Oklahoma Municipal Utility Providers joined the OWRB, OCWP partners, and 20 other exhibiting agencies in the rotunda at the Capitol to celebrate the 5th Annual Water Appreciation Day.

OSE Launches New Website

In early April, the Oklahoma Office of the Secretary of Environment, with assistance from OWRB information technology staff, launched a redesigned website.

According to J.D. Strong, Secretary of Environment, more and more people are relying on this website for environmental news and information, so it was important for the site to become more user-friendly and contemporary.

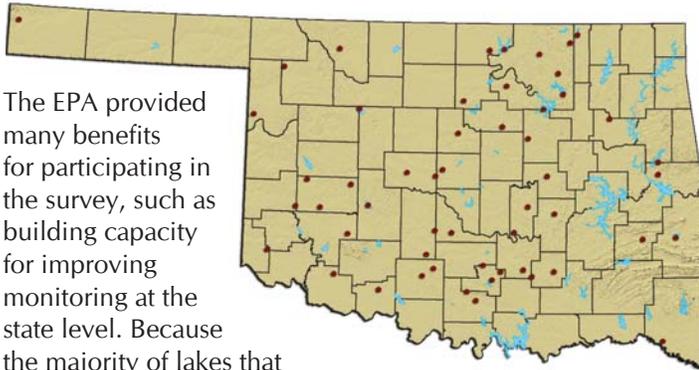
Displayed on the homepage are links to pertinent information on Oklahoma's water, land, wildlife, and air. The latest success stories from Oklahoma's environmental agencies, frequently asked questions, and a calendar with upcoming environmental events and announcements are also available on the site at www.environment.ok.gov. ♦



EPA's National Lakes Assessment

In 2007, the Oklahoma Water Resources Board participated in the National Lakes Survey by sampling thirty-five probabilistic sites. Environmental Protection Agency (EPA) Clean Water Act monies were leveraged with regional funds for 18 additional sites allowing a state level survey. The bulk of the entire probabilistic survey included Beneficial Use Monitoring Program (BUMP) lakes.

National Lakes Survey Sites



The EPA provided many benefits for participating in the survey, such as building capacity for improving monitoring at the state level. Because the majority of lakes that were sampled by the probabilistic survey were BUMP lakes, the demonstration allowed for long-term BUMP monitoring data to be compared to the data from the survey. It also provided an inventory of the lakes within the twelve ecoregions of the state and allowed biological parameters and data to be added to the assessment of the state's waters.

Oklahoma is looking to the future with the possibility of using the data for further development of nutrient and biological criteria, re-evaluating the water quality standards for these waters, and incorporating new parameters into the established monitoring program. ♦

Flood Insurance Critical for Oklahomans

Governor Brad Henry has proclaimed May 2010 Flood Awareness Month in Oklahoma.

Flooding is involved in 90 percent of all natural disasters in the U.S. In 2009, Oklahoma experienced 129 flooding events that caused approximately \$3.37 million dollars in property damage.

Flood insurance, provided at a low cost by the National Flood Insurance Program (NFIP) in exchange for intelligent land use planning, is advisable for those living both in high flood risk areas and low-to-moderate risk areas. Citizens can insure a residential building for up to \$250,000 and its contents up to \$100,000, and renters can cover belongings up to \$100,000. Non-residential property owners can insure their buildings up to \$500,000, and contents up to \$500,000. The premiums for an NFIP policy average about \$500 a year.

Since flood insurance policies do not take effect until 30 days after purchase, it is important to buy coverage now. For more information on the NFIP in Oklahoma, call Gavin Brady, OWRB State Floodplain Coordinator, at 918-581-2924. ♦

SAVE THE DATE

October 26-27, 2010

Oklahoma Governor's Water Conference & Water Research Symposium

Embassy Suites Hotel & Convention Center
Norman, Oklahoma

Enhanced BUMP Report Makes Data More Accessible

The OWRB's comprehensive annual report of statewide water quality data is now available in a new tabular, user-friendly format with links to the online data. You can find the full report at www.owrb.ok.gov/2009BUMPReport/index.htm or on compact disc by calling the OWRB at 405-530-8800.

The 2008-2009 report of the Beneficial Use Monitoring Program (BUMP) features easy to read summaries of physical, chemical, and now biological data from fish and macroinvertebrate collections. The data is taken from approximately 130 lakes and 93 stream sites. Each summary page also has web links directly to the data used and available for download in spreadsheet format.

OWRB staff sample rivers in the network annually and lakes on a three year rotation. Data provided by the program plays an essential role in the state's water quality management decision-making process by identifying waters experiencing impairments as well as the cause of declining water quality.

BUMP is also invaluable to the development and refinement of Oklahoma's Water Quality Standards, where beneficial uses are assigned to individual lakes, streams, and stream segments based upon the primary benefits derived from those waters by the public.

BUMP data gathered during 2009 indicate that the major water quality concerns of Oklahoma lakes are dissolved oxygen, pH, and turbidity. Data also indicate that sixteen (16%) percent of the lakes sampled in 2008-2009 were "hyper-eutrophic," containing an excessive amount of nutrients that could lead to taste and odor problems.

The vast majority of streams sampled within the past two years were suitable for uses related to public and private water supply. Inorganic turbidity, through sediments from runoff, was the primary detriment to fish and wildlife propagation. Bacteria (enterococci) were the major concern for recreation that involves primary body contact with the water. A small number of sampled streams had problems associated with dissolved solids (chlorides and sulfates), thereby limiting irrigation uses. A number of streams were also identified as having threatened Aesthetics uses due to high levels of phosphorus and chlorophyll-a.

For more information on the OWRB's Beneficial Use Monitoring Program please call 405-530-8800 or visit the OWRB website at www.owrb.ok.gov. ♦

Oklahoma Comprehensive Water Plan

OCWP

Recent Developments

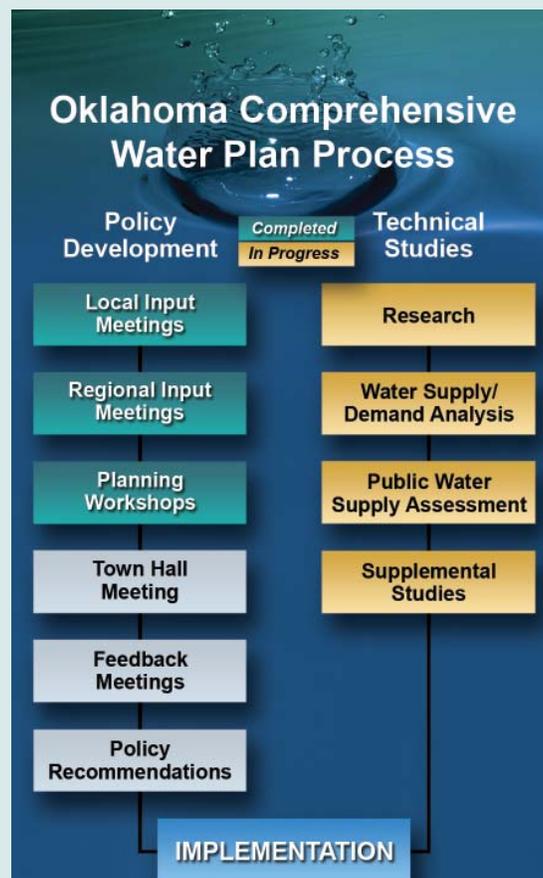
- Almost every OCWP policy development participant was in attendance at the public input strategy seminar held March 29 at the Moore-Norman Technology Center. Participants were briefed on the results of last summer's Planning Workshops, including draft water resource management strategies, in preparation for the upcoming Water Town Hall.
- The Provider Survey Summary is now available online at www.owrb.ok.gov/ocwp.php.
- Regional- and basin-level water resource planning fact sheets, a centerpiece of the Water Plan effort, are currently being developed. Among other benefits, these publications will include detailed information and data to assist public water supply providers in planning for their 50-year future.

Upcoming

- The OCWP Town Hall, led by the Oklahoma Academy of State Goals, will take place on May 23-26 in Norman. Twenty water resource management approaches, developed by 240 water policy development participants during three workshops in 2009, will serve as the basis for discussion. About 177 individuals, consisting of 144 OCWP public input participants and 33 Academy members, will split into smaller groups to review and amend strategies for discussion among the group at large. On the final day of the meeting, all recommendations will be finalized and prioritized. The OCWP Town Hall discussion topics (Public Policy Themes) include the following:
 - Water Availability
 - Water Conservation
 - Land Use Practices
 - Intergovernmental Water Resource Management
 - Interagency Water Resource Management
 - Surface and Ground Water Relationship
 - Water Sales and Transfers
 - Conflict Resolution
 - Balancing Water Supply and Demand
 - Stakeholder Involvement
 - Local and Regional Issues

Water Plan Objectives

1. Characterize demands by water use sector.
2. Identify reliable supplies to meet forecasted demands.
3. Perform technical studies in support of the evaluation of emerging water management issues.
4. Engage comprehensive stakeholder involvement to make recommendations regarding the management of Oklahoma's water resources.
5. Make "implementable" recommendations regarding the future of water management in Oklahoma based upon technical evaluations and stakeholder input.



Goals of the OCWP Update

- To provide safe and dependable water supply for all Oklahomans while improving the economy and protecting the environment.
- To provide information so that water providers, policy-makers, and water users can make informed decisions concerning the use and management of Oklahoma's water resources.

For more information on the OCWP, visit the OWRB's website at www.owrb.ok.gov. For questions and comments concerning policy development and public meetings, contact the OWRRI at 405-744-9994, by e-mail at waterplan@okstate.edu, or go to <http://okwaterplan.info>.

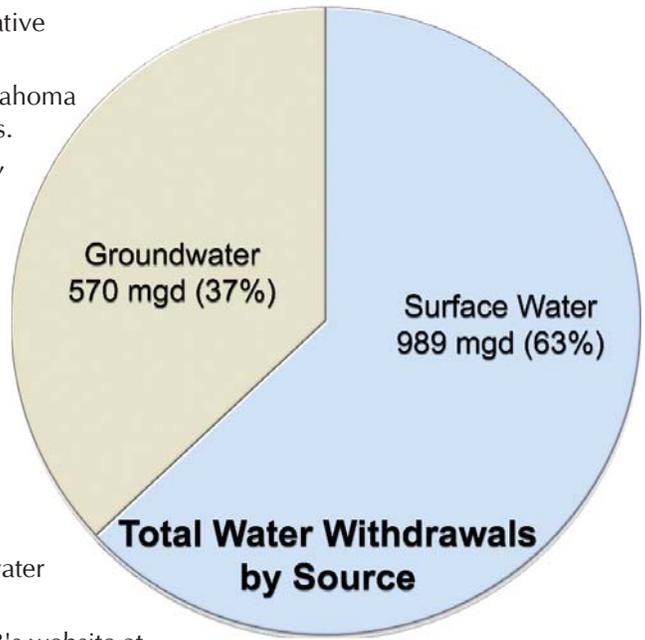
Historical Water Use Report Now Available

The U.S. Geological Survey (USGS) and OWRB have issued a cooperative report on historical water use in the state from 1950–2005.

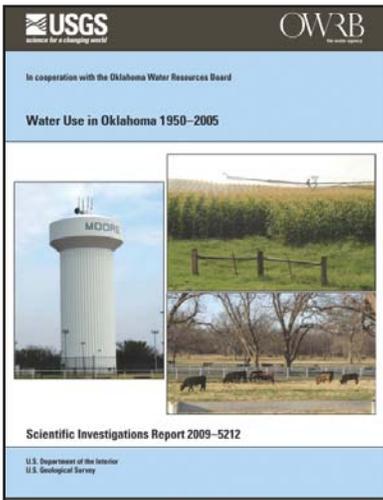
The detailed report presents estimates of freshwater withdrawal in Oklahoma by source (surface or groundwater) and use category in 5-year intervals. Categories include public supply, irrigation, livestock and aquaculture, thermoelectric-power generation (cooling water), domestic and commercial, and industrial and mining. Withdrawal data are aggregated and tabulated by county, major river basin, and principal aquifer.

In 2005, 1,746,080 acre-feet (1,559 million gallons per day) of water was withdrawn for all uses: 63% from surface water sources and 37% from groundwater sources. Public water supply (41% of total use) is the number one use of water in Oklahoma; irrigation (32%) is a close second, followed distantly by livestock and aquaculture (12%).

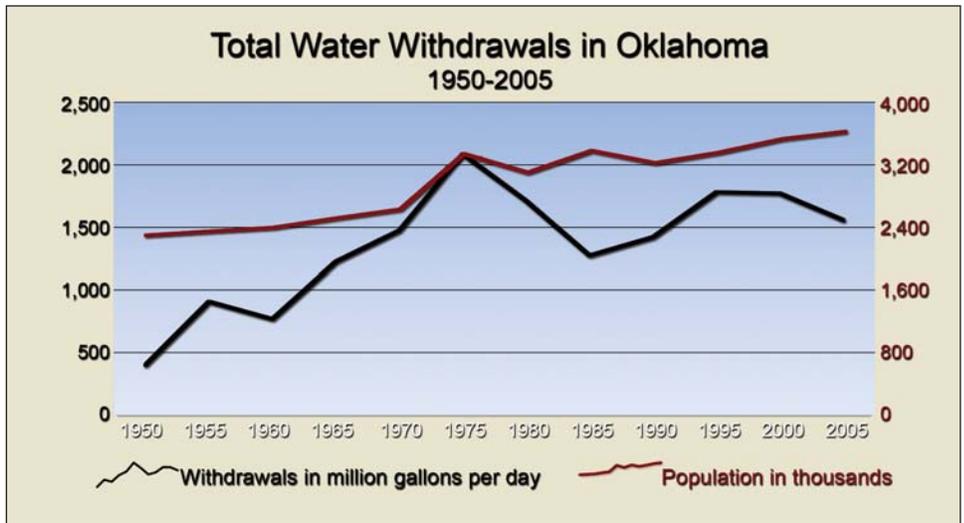
Irrigation is the primary use for groundwater (63%) and accounts for 13% of surface water withdrawals in Oklahoma. Public supply is the primary use for surface water (54%) and accounts for 20% of groundwater withdrawals.



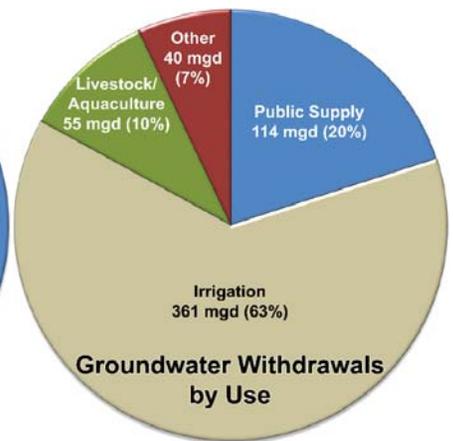
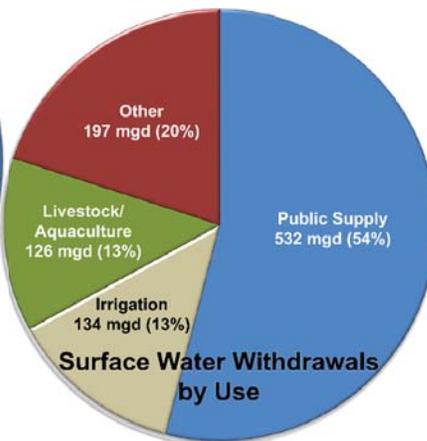
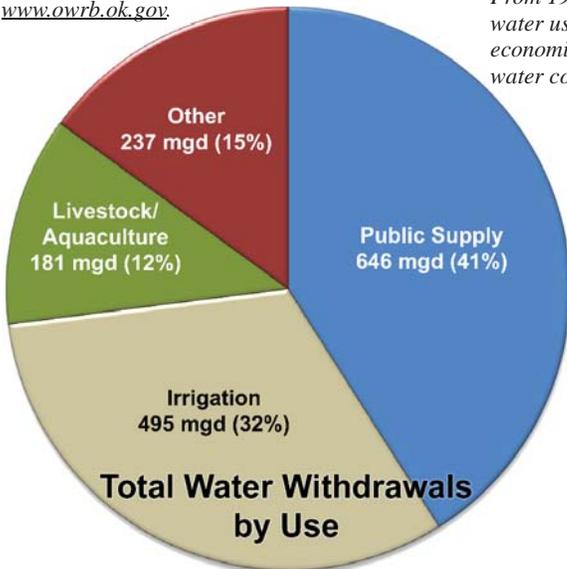
To view the report, visit the OWRB's website at www.owrb.ok.gov.



“Water Use in Oklahoma 1950-2005,” published by the USGS and funded through the Oklahoma Comprehensive Water Plan, is now available for download on the OWRB website at www.owrb.ok.gov.



From 1950 to 2005, water use in Oklahoma increased from 402 mgd to 1,559 mgd. In that interval, water use has been impacted considerably by a number of factors, including population growth, economic trends, legal decisions, periodic droughts, infrastructure growth, and the institution of water conservation measures by municipalities, industries, and agriculture.



Drought Update

Reservoir Storage

As of March 23, five reservoirs (of thirty-one selected major federal reservoirs across Oklahoma listed at right) are operating at less than full capacity, according to information from the U.S. Army Corps of Engineers (Tulsa District); seventeen reservoirs have experienced lake level decreases since February 16.

Palmer Drought Severity Index

According to the latest Palmer Drought Severity Index (see table below), no climate divisions in Oklahoma are currently experiencing drought conditions.

Standardized Precipitation Index

The latest monthly Standardized Precipitation Index (see table below) indicates no near long-term dryness in any of Oklahoma's nine climate divisions.



LAKE	Change in Elevation (feet) 2/16-3/23/10	Current Flood Control Storage (acre-feet)
North Central (2)		
Fort Supply	-0.58	0
Great Salt Plains	-0.14	3,189
Kaw	0.44	4,763
Northeast (3)		
Birch	0.99	1,116
Copan	0.96	7,320
Fort Gibson	-1.63	20,100
Grand	0.35	17,601
Hudson	0.51	13,669
Hulah	1.35	13,212
Keystone	-0.55	18,713
Oologah	-0.74	109,408
Skiatook	0.07	8,315
West Central (4)		
Canton	0.13	-4,933
Foss	0.72	-601
Central (5)		
Arcadia	0.20	818
Heyburn	1.42	1,747
Thunderbird	0.12	2,074
East Central (6)		
Eufaula	-1.26	116,704
Tenkiller	-3.54	19,388
Southwest (7)		
Fort Cobb	-0.31	1,635
Lugert-Altus	2.49	-73,158
Tom Steed	-0.04	-20,494
South Central (8)		
Arbuckle	-0.18	1,952
McGee Creek	-0.01	3,040
Texoma	-1.83	94,013
Waurika	-0.36	3,447
Southeast (9)		
Broken Bow	-5.40	-15,380
Hugo	-4.42	7,974
Pine Creek	-6.62	2,640
Sardis	0.35	9,017
Wister	-1.86	15,322

CLIMATE DIVISION	Standardized Precipitation Index (through March 2010)				Palmer Drought Severity Index
	3-month	6-month	9-month	12-month	March 20, 2010
Northwest (1)	Moderately Wet	Moderately Wet	Near Normal	Near Normal	Moist Spell
North Central (2)	Near Normal	Near Normal	Near Normal	Near Normal	Unusual Moist Spell
Northeast (3)	Near Normal	Near Normal	Moderately Wet	Moderately Wet	Unusual Moist Spell
West Central (4)	Near Normal	Near Normal	Moderately Wet	Near Normal	Unusual Moist Spell
Central (5)	Near Normal	Near Normal	Moderately Wet	Near Normal	Very Moist Spell
East Central (6)	Near Normal	Near Normal	Near Normal	Near Normal	Unusual Moist Spell
Southwest (7)	Near Normal	Near Normal	Near Normal	Near Normal	Unusual Moist Spell
South Central (8)	Near Normal	Near Normal	Moderately Wet	Very Wet	Very Moist Spell
Southeast (9)	Near Normal	Moderately Wet	Very Wet	Very Wet	Very Moist Spell

For more drought information, and to obtain updated information on Oklahoma's drought and moisture conditions, go to www.owrb.ok.gov/supply/drought/drought_index.php.

www.owrb.ok.gov

*Rudy Herrmann, Chairman • Mark Nichols, Vice Chairman • Linda Lambert, Secretary
Ford Drummond • Ed Fite • Jack W. Keeley • Kenneth K. Knowles • Richard Sevenoaks • Joe Taron*

The mission of the Oklahoma Water Resources Board is to manage and protect the water resources of the state and plan for Oklahoma's long-range water needs in a responsive, innovative, and professional manner to ensure that all Oklahomans have adequate quantities of good water.



1st Quarter 2010

Darla Whitley, Editor

Staff Writers:

Brian Vance & Darla Whitley

Photography:

Barry Fogerty

*E-mail comments, questions,
or article submissions to
pubinfo@owrb.ok.gov
or call us at (405) 530-8800*

The Oklahoma Water News is published by the Oklahoma Water Resources Board as authorized by Duane A. Smith, Executive Director. Eighty-eight hundred copies have been printed by University Printing Services at an approximate cost of 38 cents each. Copies have been deposited at the Publications Clearinghouse of the Oklahoma Department of Libraries.

FINANCIAL ASSISTANCE PROGRAM UPDATE

Loans & Grants Approved as of March 9, 2010

FAP Loans—323 for \$632,575,000

The OWRB's Financial Assistance Program (FAP), created by the State Legislature in 1979, provides loans for water and wastewater system improvements in Oklahoma. The tremendous popularity of the bond loan program is due, in part, to extended payoff periods of up to 30 years at very competitive interest rates, averaging approximately 4.762 percent since 1986.

CWSRF Loans—223 for \$825,945,075

The Clean Water State Revolving Fund (CWSRF) loan program was created in 1988 to provide a renewable financing source for communities to draw upon for their wastewater infrastructure needs. The CWSRF program is Oklahoma's largest self-supporting wastewater financing effort, providing low-interest loans to communities in need.

DWSRF Loans—117 for \$628,624,249

The Drinking Water State Revolving Fund (DWSRF) loan program is an initiative of the OWRB and Oklahoma Department of Environmental Quality to assist municipalities and rural water districts in the construction and improvement of drinking water systems. These projects are often mandated for communities to obtain compliance with increasingly stringent federal standards related to the treatment of drinking water.

REAP Grants—533 for \$47,095,065

The Rural Economic Action Plan (REAP) Program was created by the State Legislature in 1996. REAP grants, used for water/wastewater system improvements, target primarily rural communities with populations of 7,000 or less, but priority is afforded to those with fewer than 1,750 inhabitants.

Emergency Grants—554 for \$32,882,503

Emergency grants, limited to \$100,000, are awarded to correct situations constituting a threat to life, health, or property and are an indispensable component of the agency's financial assistance strategy.

Drought Response Program Grants—2 totaling \$200,000

Through the OWRB's Drought Response Program, funding is available for communities in most dire need during state drought emergencies declared by the Governor. A maximum of \$300,000 is diverted from existing OWRB Emergency Grant funds to establish the Program.

American Recovery & Reinvestment Act Funding—\$53,280,907

Through the OWRB's conventional CWSRF and DWSRF loan programs, ARRA funds are utilized to provide additional subsidization to Oklahoma communities for water and wastewater infrastructure improvements as well as to provide benefits to the state's environment and create jobs for Oklahoma workers.

Total Loans/Grants: 1,752 for \$2,167,321,893
Estimated Savings: \$776,125,342

Applicants eligible for water/wastewater project financial assistance vary according to the specific program's purpose and requirements, but include towns and other municipalities with proper legal authority, various districts established under Title 82 of Oklahoma Statutes (rural water, master/water conservancy, rural sewage, and irrigation districts), counties, public works authorities, and/or school districts. Applications for agency financial assistance programs are evaluated individually by agency staff. Those meeting specific program requirements are recommended by staff for approval at monthly meetings of the nine-member Water Board.

**For more information, call 405-530-8800
or go to www.owrb.ok.gov/financing.**