

# OKLAHOMA Water News

3rd Quarter 2013

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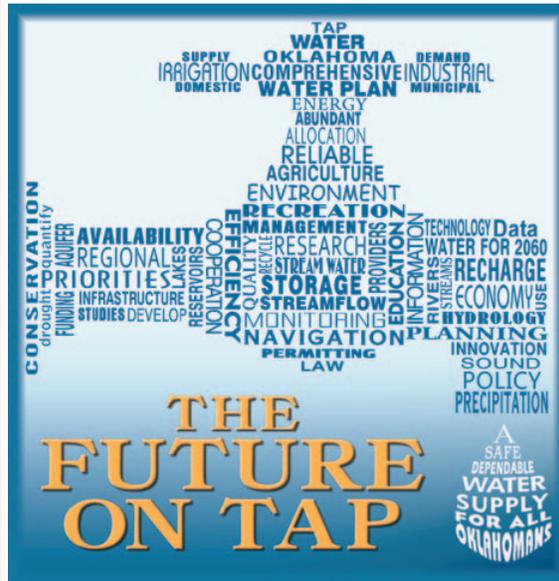
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## The Future on Tap: 34th Annual Governor's Water Conference to Focus on Future Supply

The 34th Annual Oklahoma Governor's Water Conference and Research Symposium will be held on October 22-23 at the Sheraton-Reed Conference Center in Midwest City. Registration and sponsorship information are available online at [www.owrb.ok.gov/waterconference](http://www.owrb.ok.gov/waterconference).

This year's conference theme, "The Future on Tap," focuses on the many water challenges that lie ahead for Oklahoma. Due to persistent drought and recent projections indicating that statewide demand for water will increase by at least one-third over the next 50 years, it's clear that water stress will continue to mount. Innovative water policies and programs will be required to sustain and protect our water resources and the growth and prosperity those resources afford every Oklahoman. Speakers and conferees at the 34th Annual Governor's Water Conference and Research Symposium will explore sensible solutions to these threats to Oklahoma's water future.



Governor Mary Fallin and Lt. Governor Todd Lamb will open the conference. The keynote address will be given by Steven Solomon, author of *Water: The Epic Struggle for Wealth, Power, and Civilization*. Solomon's all-encompassing inquiry into the science and politics of water is predicated on the incontrovertible, yet too often disregarded, fact that water is essential to both life and civilization. He inspires citizens to place a higher value on water and establish wiser approaches to its use. Solomon has written for *The New York Times*, *BusinessWeek*, *The Economist*, *Forbes*, and *Esquire*, and he has been a featured guest on numerous popular television and radio news programs.

Tuesday morning's remaining agenda will include a panel on Preparing for Drought, featuring Veva DeHeza, Regional Drought

*(continued on page 2)*

## From the Director

As temperatures drop, the irrigation season winds down, and communities ease up on their water usage, the multi-year Oklahoma drought continues to hang on. In September, folks in many areas—including, surprisingly, the Panhandle—received much-needed rainfall, which provided some temporary relief. Unfortunately, southwest Oklahoma wasn't so lucky, and it remains the most consistently dry region of the state since the beginning of the current drought episode in late 2010. Still, much of our state remains in drought, reminding us yet again that only time, and a lot of rainfall events, can bring us out of such dire, long-term disasters. And should the drought suddenly "end," the devastating impact to Oklahoma's economy will extend for years.



J. D. Strong, Executive Director  
Oklahoma Water Resources Board

*(continued on page 2)*



## Water Conference (continued)



*Governor Mary Fallin emphasizes the importance of being good stewards of Oklahoma's invaluable water resources in a video recorded by Outdoor Oklahoma producer Blake Podhajsky (standing) and Micah Holmes of the Oklahoma Department of Wildlife Conservation (ODWC). The ODWC generously volunteered filming services in support of the Oklahoma Governor's Water Conference and its ongoing partnership with the OWRB.*

Information Coordinator for NOAA; Collins Balcomb with the US Bureau of Reclamation; and an update on Water for

2060 by OWRB Executive Director J.D. Strong. The luncheon program will include presentation of the Oklahoma Water Pioneer Awards and updates from Oklahoma's new Secretary of Energy and Environment, Michael Teague, and USACE Tulsa District Engineer, Col. Richard Pratt.

Tuesday afternoon events will include the Oklahoma Water Magazine, with concise updates on water issues currently in the spotlight. The first of two unique, interactive roundtable discussions, beginning at 3:30 on Tuesday, will explore the topic of Conjunctive Water Management. Participants will delve into the pros and cons of managing hydrologically connected surface and groundwater supplies.

Wednesday morning's plenary session will include a legal update by Oklahoma Attorney General Scott Pruitt; a legislative update by Brian Bingman, President Pro Tempore of the Oklahoma Senate; and an international view of sustainable infrastructure by Sharlene Leurig with Ceres, a non-profit organization advocating sustainability leadership. Jon Radtke with Coca-Cola North America Group; Greg Fisher with Denver Water; and John Tintera, representing oil/gas production, will continue the in-depth discussion of sustainability practices. Wednesday's luncheon will include Dr. David Zetland, author of *The End of Abundance*,

*(continued on page 3)*

## From the Director (continued)

While we can't make it rain, the state will soon be in a much better position both to provide an immediate helping hand to those ravaged by drought and to make our communities and rural areas more resistant to future drought events. The new Emergency Drought Relief Fund, approved last legislative session, makes \$3 million available for drought mitigation and projects. We are working closely with the Department of Agriculture, Food and Forestry and Conservation Commission to determine project eligibility and expenditure guidance.

The first meeting of the Water for 2060 Advisory Council was held on August 20 at the OWRB. While this get-together primarily served to provide initial guidance to the 14 appointed members, we had excellent discourse about how potential conservation measures might impact various water users and constituency groups. It is evident to me that their minds are wide open to the consideration of new conservation strategies, incentives, and technologies as well as the creation of "new" supplies through utilization of unconventional water sources. I'm excited to lead this exceptional group over the next few years as we work cooperatively to develop Oklahoma's first statewide water conservation plan.

I want to congratulate Michael Teague, who Governor Fallin recently appointed as Oklahoma's first Cabinet Secretary of Energy and Environment. Secretary Teague brings unique experience to this new combined post. As the recent District Commander of the Army Corps of Engineers' Tulsa District, he was the leader of one of the OWRB's most important

planning partners. I look forward to working closely with Secretary Teague on the many issues facing our water supplies as a critically important element in both energy production and environmental sustainability in Oklahoma.

At the same time, I will miss Gary Sherrer, Oklahoma's former Secretary of Environment, who stepped down on July 1 to pursue other interests. As Gov. Fallin stated in her announcement, Gary was especially gifted in obtaining consensus among people with diverse interests and agendas. He remains a model of dedicated public service.

On another related note, I welcome Col. Richard Pratt, who assumes the Corps' leadership role in the Tulsa District region. Both Col. Pratt and Secretary Teague will speak back-to-back during the October 22 Governor's Water Conference luncheon.

For a complete picture of the 34th Annual Governor's Water Conference, which will be held October 22-23 at the Reed Center in Midwest City, refer to the draft agenda in this issue of the "Water News." We've got yet another impressive lineup, including keynote speaker Steve Solomon, author of "Water: The Epic Struggle for Wealth, Power, and Civilization." Also appearing will be Lt. Gov. Todd Lamb, Attorney General Scott Pruitt, EPA Regional Administrator Ron Curry, and a number of other national figures to discuss wide-ranging water topics. To register, visit the OWRB's website or call us at 405-530-8800. In conclusion, please take note that our next Board meeting has been moved to coincide with that event following adjournment on the last day. 💧

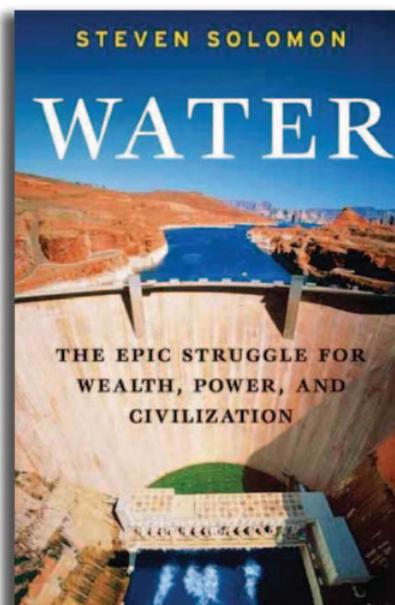
*Water Conference (continued)*

## Roundtable 1: Conjunctive Management

Conjunctive Management refers to the coordinated management of hydrologically connected surface and groundwater supplies to increase the combined water supply yield while enhancing water reliability and associated economic and environmental benefits. Should future policy reflect management in areas of the state, such as in the Arbuckle-Simpson aquifer, where groundwater pumping impacts surface water flows and availability, and vice versa, or are the potential ramifications to private property rights too great?

announcement of poster contest winners, and presentations by 4H speech contest winners.

Wednesday afternoon's roundtable discussion will focus on Out-of-Basin Water Transfers, and will include representatives



*Steven Solomon, author of Water: The Epic Struggle for Wealth, Power, and Civilization, will provide the keynote address for the Governor's Water Conference on October 22.*

from the Canton Lake Association, Oklahoma Farm Bureau, Waurika Master Conservancy District, and Denver Water.

The regular monthly meeting of the OWRB will be held at 3:30 on Wednesday.

*(continued on page 4)*

## 34th Annual Oklahoma Governor's Water Conference and Research Symposium

### 8:00 Welcome

Rudy Herrmann, OWRB Chairman  
Gov. Mary Fallin  
Lt. Governor Todd Lamb  
Water Issues in the Region  
Ron Curry, Administrator, EPA Region VI  
Keynote Address  
Steve Solomon, Author

### 9:30 Break

### 10:00 Preparing for Drought

Drought Impacts and Outlook  
Veva DeHeza, NOAA  
Drought Mitigation Tools  
Collins Balcombe, Bureau of Reclamation (OK-TX)  
Minimizing Drought Impacts through the Water Plan  
J.D. Strong, OWRB Executive Director

### 11:30 Luncheon

Michael Teague, OK Secretary of Energy & Environment  
Col. Richard A. Pratt, Tulsa District Engineer, USACE  
Oklahoma Water Pioneer Awards

### 1:30 Oklahoma Water Magazine

OCWP Instream Flow Workgroup  
John Rehring, Carollo Engineers, Inc.  
Oklahoma Groundwater Monitoring Assessment Program  
Derek Smithee, OWRB  
Water for Recreation & Tourism  
Gene Gilliland, OK Department of Wildlife Conservation  
Navigation in Oklahoma  
Bob Portiss, Director, Tulsa Port of Catoosa

### 3:30 Roundtable Discussion: Conjunctive Water Management

### 5:00 Reception

### 8:00 Welcome

Rudy Herrmann, OWRB Chairman  
Legal Update  
Scott Pruitt, Oklahoma Attorney General  
Legislative Development  
Sen. Brian Bingman, President Pro Tempore  
Developing Sustainable Water Systems  
Sharlene Leurig, Ceres

### 9:30 Break

### 10:00 Breakthroughs in Water Sustainability

Partnerships in Conservation  
Jon Radtke, Coca-Cola North America Group  
Conservation as a Water Supply Solution  
Greg Fisher, Denver Water  
Oil/Gas Production Water Recycling  
John Tintera, Sebree & Tintera

### 11:30 Luncheon

Luncheon Address: The End of Abundance  
Dr. David Zetland, Author  
OWRC Poster Contest Winners  
4H Speech Contest Winners

### 1:30 Roundtable Discussion: Out-of-Basin Water Transfers

### 3:00 Break

### 3:30 OWRB October Monthly Meeting

### 5:00 Adjourn

For the most up-to-date agenda and conference information, go to [www.owrb.ok.gov/waterconference](http://www.owrb.ok.gov/waterconference)

*Water Conference (continued)*

A block of rooms has been reserved at the Sheraton Hotel (adjacent to the Reed Conference Center) at a standard

room rate of \$124/night. Space is limited so conferees are encouraged to make reservations as soon as possible by calling (405) 455-1800 or (888) 627-8566. ♦

**Roundtable 2:**

**Out-of-Basin Water Transfers**

Out-of-basin water transfers are commonly utilized to address supply challenges presented by the unequal distribution of water resources in Oklahoma and throughout the western U.S. How should the state reconcile the often significant water supply benefits of interbasin transfers—especially to community water systems—with the impacts to users and economies in the originating basin?



The regular October meeting of the Oklahoma Water Resources Board will be held at the Sheraton-Reed Conference Center in Midwest City, Oklahoma, at 3:30 p.m. on Wednesday, October 23, 2013.

***GMAP Establishes Baseline Network for Six Aquifers***

In its initial year of operation, the OWRB’s Groundwater Monitoring Assessment Program (GMAP) has experienced considerable success in establishing its baseline water well quantity and quality network. Early results from staff activities conducted this summer indicate up to a 98 percent success rate in the sampling and measurement of targeted wells.

Initial data have been collected for five aquifers: Ogallala Northwest, Canadian River, Elk City, Gerty, and Rush Springs. Data include water level measurements for 199 wells and a variety of water quality measurements for 143 wells. Sampling is scheduled to begin in the Garber-Wellington aquifer in October. ♦

***Teague Assumes New Energy and Environment Post***



Col. Michael Teague, a 28-year veteran of the U.S. Army Corps of Engineers will serve as Oklahoma’s first Secretary of Energy and Environment. Gov. Fallin announced the appointment on August 16. Teague retired from the Corps in August and assumed his new duties on September 3.

As the USACE’s Tulsa District commander, Teague was responsible for a civil works program encompassing

all of Oklahoma, a large portion of southern Kansas and the panhandle of northern Texas. He oversaw over 700 employees in engineering, construction and operations, as well as an annual budget of \$700 million.

Throughout his career, Teague has dealt with power generation and distribution, water desalinization, and environmental impact studies. He has facilitated and negotiated numerous solutions regarding federal and state agencies, tribes, and local stakeholders and has acted as a liaison between the Tulsa District and the United States Congress.

Teague received a bachelor’s degree in civil engineering from Norwich University and master’s degrees in operations analysis from the Naval Postgraduate School and in national security and strategic studies from the Naval War College. ♦



*Kevin Killhoffer, a sampling technician for the OWRB’s Groundwater Mapping and Assessment Program (GMAP), tests groundwater for alkalinity and hardness. This well, located west of Sharon, is one of 42 tested last summer in the northwest segment of the Ogallala Aquifer.*

## Board Selects New Officers

At its July 16 meeting, the nine-member Board elected new officers for the next year: Rudy Herrmann (Tulsa), Chairman; Tom Buchanan (Altus), Vice Chairman; and Linda Lambert (Oklahoma City), Secretary. ♦

## Pratt Appointed New Corps District Commander

Col. Richard Pratt is the new commander of the Tulsa District of the U.S. Army Corps of Engineers. Col. Pratt assumed his new appointment at a Change of Command ceremony on July 12. He succeeds departing commander Col. Michael Teague, Oklahoma's new Secretary of Environment and Energy.



A native of Cape Cod, Massachusetts, Pratt received his commission from Norwich University Military College in Vermont in 1990. Most recently, he worked as the engineer organizational integrator at the Navy War College in Newport, Rhode Island. Pratt earned a Master of Science Degree in Education from Long Island University in 1998. He is a registered Professional Engineer in the Commonwealth of Virginia. ♦

## Secret, Wood Pass Away

The OWRB family recently lost two influential members: former Board member Bill Secret and division chief J.A. Wood.



A staunch rural water advocate, Secret served the OWRB for 24 years. He was a longtime board member of both the National and Oklahoma Rural Water Associations, also serving as manager of Rural Water District 4 in Wagoner County for 20 years, as well as city manager of Broken Arrow and mayor of Coweta.

In 1998, for his efforts on behalf of the state's water resources, he was honored by Gov. Frank Keating and the OWRB as an Oklahoma Water Pioneer. Secret died August 27 in Tulsa. He was 84.

J.A. Wood passed away on September 2 at age 72. Following his high school graduation, Wood began his OWRB career in 1959, but soon left to join the U.S. Army, serving in the Vietnam War from 1963 to 1966.



He then obtained an engineering degree from Oklahoma University and returned to the OWRB for 20 years, including an extended role as chief of the agency's Planning and Management Division. Wood retired from the OWRB in 1996. ♦

## Shower Better and Save Water

The shower is a place where we can wake up, wind down, or get ready to tackle the day. But it's also a place where Americans are wasting water, energy, and money. Whether you are remodeling your bathroom or just looking to save water and money, you can shower better.

Replacing a showerhead with a WaterSense labeled model will save the average family the amount of water it takes to wash more than 70 loads of laundry every year. Plus you'll save the energy used to heat that water, which means you'll save money on utility bills.

What's more, WaterSense labeled showerheads are independently certified for spray force and water coverage, which means you really will shower better.

For more information, visit [www.epa.gov/watersense/products/showerheads.html](http://www.epa.gov/watersense/products/showerheads.html). ♦



### Why waste...

**2,900 GALLONS of water**



**13 DAYS of energy to power your home**



**\$70 per YEAR**

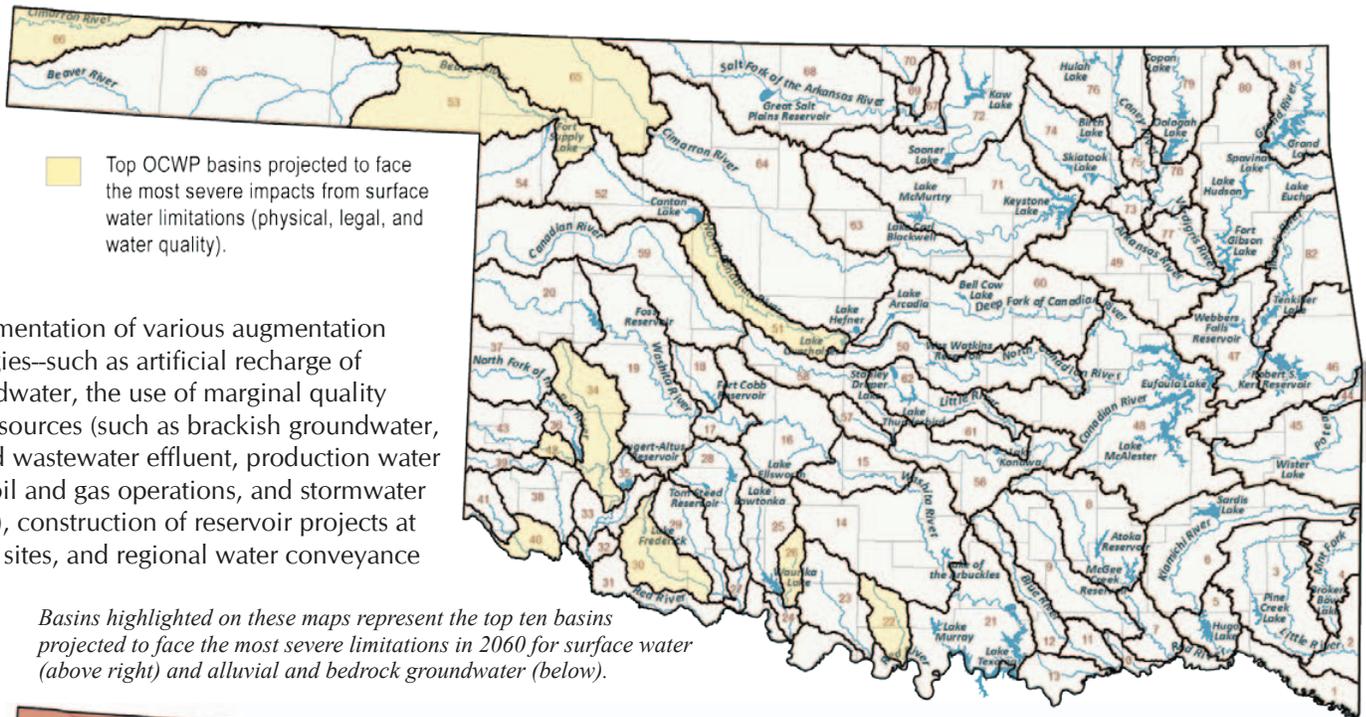


# ShowerBetter



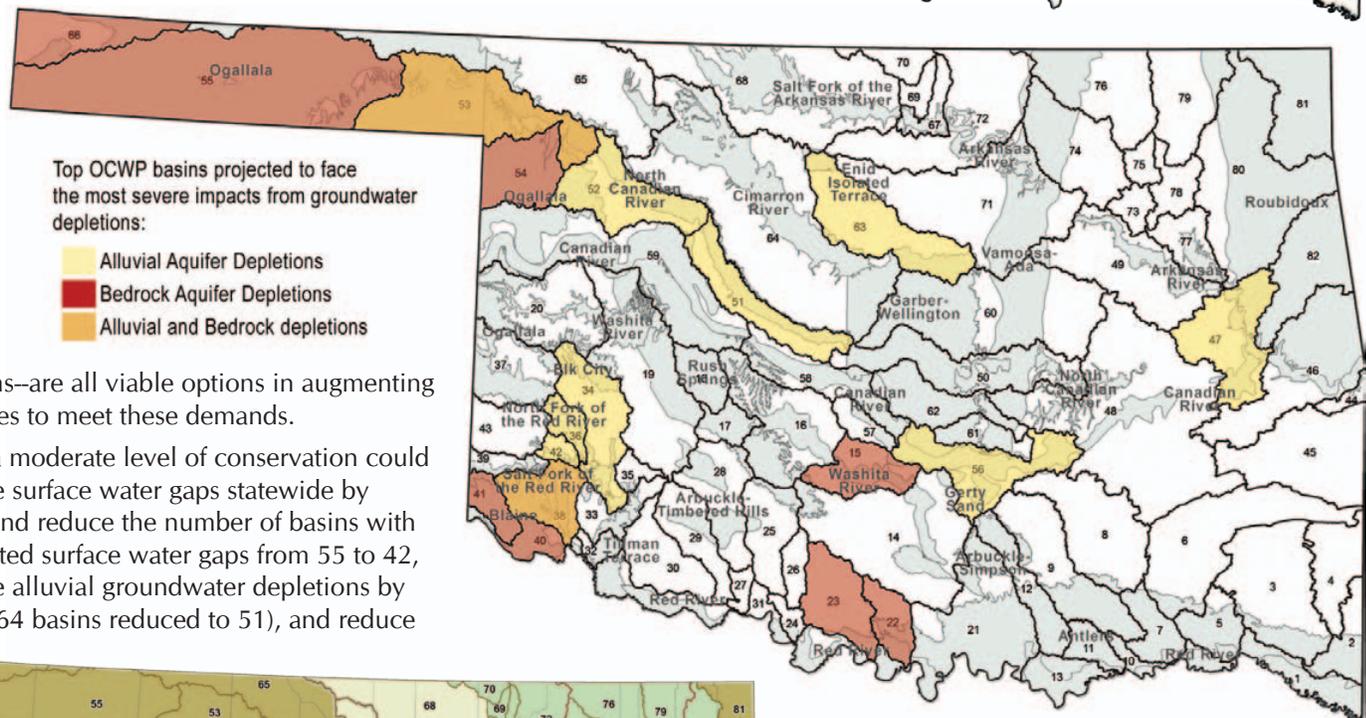
# The Future of Oklahoma's Water Supplies

The results of technical evaluations conducted for the 2012 Update of the Oklahoma Comprehensive Water Plan reveal that statewide consumptive demand for water will increase by 33% between 2010 and 2060.



Implementation of various augmentation strategies—such as artificial recharge of groundwater, the use of marginal quality water sources (such as brackish groundwater, treated wastewater effluent, production water from oil and gas operations, and stormwater runoff), construction of reservoir projects at viable sites, and regional water conveyance

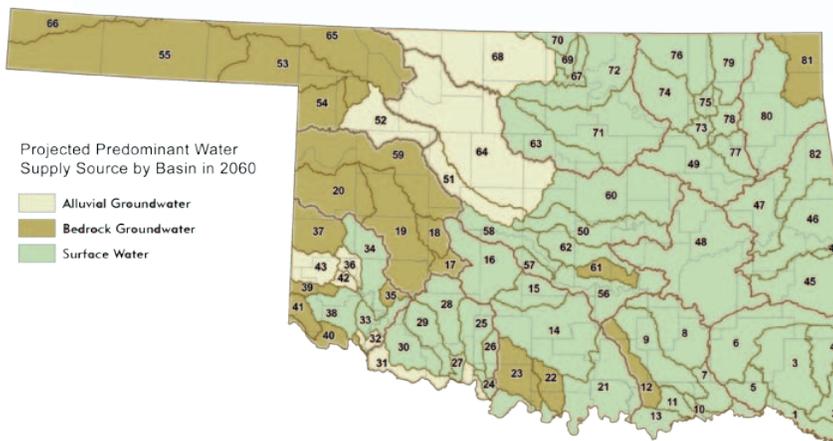
Basins highlighted on these maps represent the top ten basins projected to face the most severe limitations in 2060 for surface water (above right) and alluvial and bedrock groundwater (below).



systems—are all viable options in augmenting supplies to meet these demands.

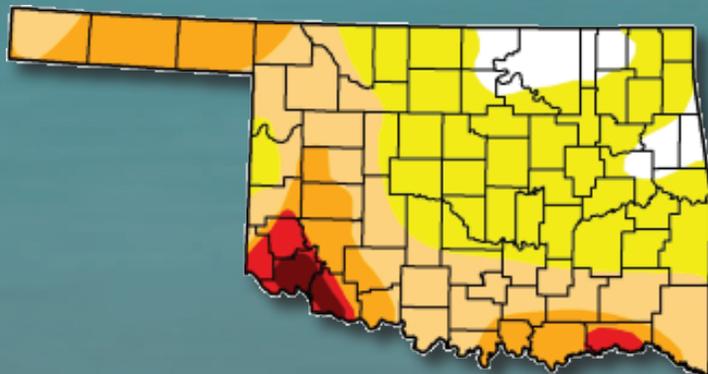
Even a moderate level of conservation could reduce surface water gaps statewide by 25% and reduce the number of basins with projected surface water gaps from 55 to 42, reduce alluvial groundwater depletions by 32% (64 basins reduced to 51), and reduce

bedrock groundwater depletions by 15% (34 basins reduced to 26). Additionally, moderate-to-aggressive conservation could satisfy projected statewide growth in water demand by 2060, plus yield cost savings of at least \$47.5 million per year (2010 dollars) associated with reduced need for drinking water and wastewater treatment. 💧



# Drought Update

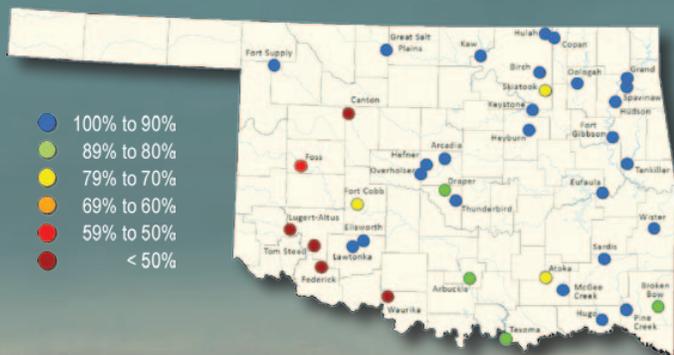
U.S. Drought Monitor  
September 24, 2013



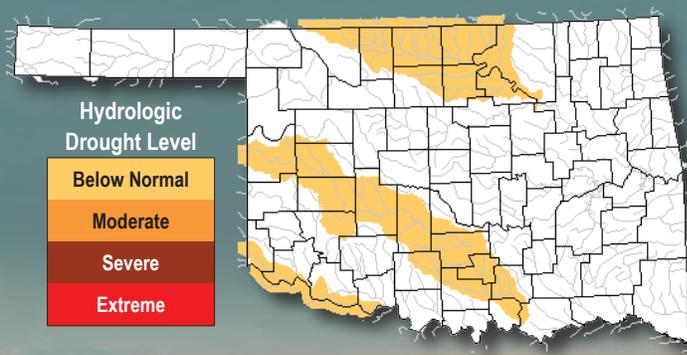
Drought Intensity & Percent of State in Drought Category

Abnormally Dry	92.09
Moderate Drought	49.13
Severe Drought	20.80
Extreme Drought	4.34
Exceptional Drought	1.46

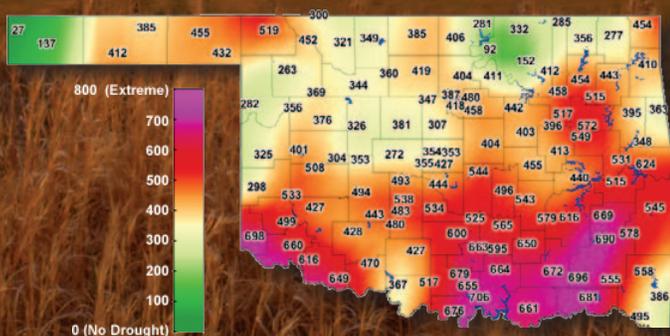
Reservoir Storage  
September 25, 2013



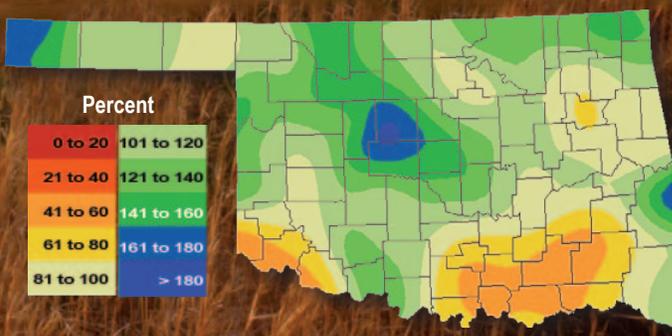
Streamflow (7-Day Average)  
September 25, 2013



Keetch-Byram Drought Index  
September 26, 2013



Percent of Normal Precipitation  
Last 90 Days (June 28 through September 25)



Data obtained from the National Drought Mitigation Center, U.S. Geological Survey, U.S. Army Corps of Engineers and Oklahoma Climatological Survey. For more drought information, and to obtain updated information on Oklahoma's drought and moisture conditions, go to [www.owrb.ok.gov/drought](http://www.owrb.ok.gov/drought).

[www.owrb.ok.gov](http://www.owrb.ok.gov)

*Rudy Herrmann, Chairman • Tom Buchanan, Vice Chairman • Linda Lambert, Secretary  
Bob Drake • Ford Drummond • Marilyn Feaver • Ed Fite • Jason Hitch • Richard Sevenoaks*

*Protecting and enhancing the quality of life for Oklahomans by managing and improving the state's water resources to ensure clean and reliable water supplies, a strong economy, and a safe and healthy environment.*



**3rd Quarter 2013**

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## FINANCIAL ASSISTANCE PROGRAM UPDATE

*Loans & Grants Approved as of September 5, 2013*

### **FAP Loans—360 for \$890,865,000**

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—272 for \$1,189,805,974**

The Clean Water State Revolving Fund (CWSRF) loan program was created in 1988 to provide a renewable financing source for communities to use 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—161 for \$859,213,300**

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—598 for \$51,969,016**

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—566 for \$33,776,351**

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—7 totaling \$490,791**

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.

### **Total Loans/Grants Approved: 1,964 for \$3,026,120,432 Estimated Savings: \$1,037,190,366**

*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](http://www.owrb.ok.gov/financing).**