

OKLAHOMA Water News

1st Quarter 2017

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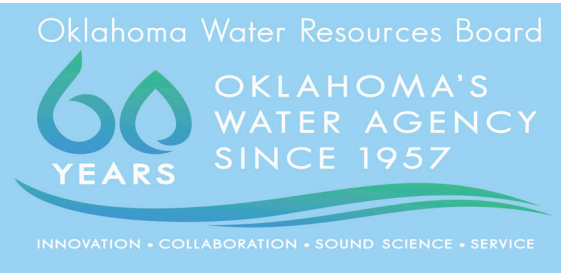
OWRB Celebrates 60th Anniversary

Now celebrating its 60th anniversary, the Oklahoma Water Resources Board continues the legacy established by the 1957 House Joint Resolution that created the state's new water agency.

Beginning in 1955, a water study committee composed of legislators and citizens traveled the state holding public meetings and documenting concerns and suggestions.

Their report affirmed that Oklahoma's water resources belong to the people of Oklahoma and should be developed by the people for their own use and benefit with proper attention given to conservation and replenishment. As a result, the new Board was established with seven members well-versed in recreational, industrial, municipal, agricultural, and soil conservation, and tasked with administering water rights, negotiating federal contracts, and developing state and local projects to assure the most effective use of Oklahoma's water resources.

During the annual Governor's Water Conference this fall, the OWRB will celebrate 60 years of success and progress, commending all those involved in strengthening Oklahoma's water resiliency. ♦



From the Director

This year marks the 60th anniversary of the Oklahoma Water Resources Board. As we look back at the remarkable progress our state has made in managing and planning for water resource needs, we can take pride in the collective leadership of so many who have contributed to furthering our mission of securing our safety, economy, and quality of life. As we celebrate this milestone, I look forward to advancing our important mission by continuing our history of providing relevant science to inform decisions, low-cost infrastructure financing, and expert service to our citizens in the years ahead.

Another legislative session is underway and I want to thank the 30 exhibitor organizations, legislators, and state officials that made this year's Oklahoma Water Appreciation Day at the Capitol a success. Several bills spurred by discussions by the produced water working group to facilitate use of produced water are making their way through the process, particularly regarding water ownership and state permitting authority. The group's March meeting was well attended by experts from the energy industry, water use sectors, treatment technology companies, researchers, and the press, and next steps for research partnerships were discussed.

With the devastating wildfires that ravaged northeast Oklahoma and its neighboring states in March, we are reminded of the importance of water for our agricultural community. Just a few months of below normal rainfall allowed the fires to spread quickly across the landscape, tragically costing seven lives and resulting in severe losses of livestock, pastures, hay, fences, and facilities totaling hundreds of millions of dollars.



Julie Cunningham, Executive Director
Oklahoma Water Resources Board

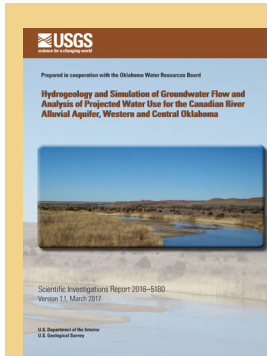
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From the Director (continued)

As regional groups around the state are working together to plan for their long-term water needs, we continue to focus on implementation of the Oklahoma Comprehensive Water Plan and core statutory programs to expand water sources, financing options, and knowledge of water quality and quantity trends. In this issue we highlight the Groundwater Monitoring and Assessment Program (GMAP), which was initiated in 2013 as a priority recommendation of the plan. GMAP provides important data and analysis for use by local interests in developing and protecting Oklahoma's groundwater resources. Reports and mapping products are available on our website.

On behalf of the board and staff I am pleased to welcome new board member Charles Darby, who will represent recreational water use in OWRB Region 9. He replaces veteran Board member Richard Sevenoaks, who served for almost 20 years. Richard will be missed for his knowledge and active leadership.

Lastly, I am extremely proud to announce that the OWRB was awarded the Certified Healthy Business title, once again, for employees' actions to stay active and healthy by engaging in various running events, the Community Supported Agriculture program, state sponsored sport leagues and other healthy activities. 💧



In cooperation with the USGS, the OWRB has completed a hydrologic survey of the Canadian River alluvial aquifer; now available online at <https://pubs.er.usgs.gov/publication/sir20165180>. Along with a detailed description of the hydrogeology of the aquifer, the report includes 10-year hypothetical drought scenarios. Several future predictive scenarios are provided that estimate the Equal Proportionate Share pumping rate for different time periods.

GMAP Expands Baseline Network to All Major Aquifers

The OWRB's Groundwater Monitoring and Assessment Program (GMAP) team is currently expanding the baseline monitoring network to include the Roubidoux and Boone aquifers, the final two major Oklahoma aquifers to be added to the program.

Initiated in 2013 by legislative funding for priority recommendations of the Oklahoma Comprehensive Water Plan (2012), GMAP is Oklahoma's first holistic, long-term, aquifer-based program. Groundwater sampling is conducted on a network of approximately 750 wells in Oklahoma's 22 major aquifers.

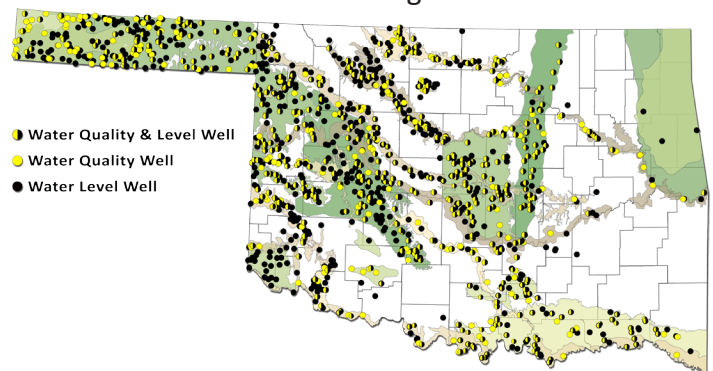
Through the program, water is being sampled from existing groundwater wells and analyzed for parameters such as nutrients, dissolved metals, alkalinity, hardness, dissolved oxygen, pH, and total dissolved solids.

Furthermore, to improve understanding of the effects of seasonal, climatic, and usage patterns, water level data is collected both seasonally and continuously statewide.

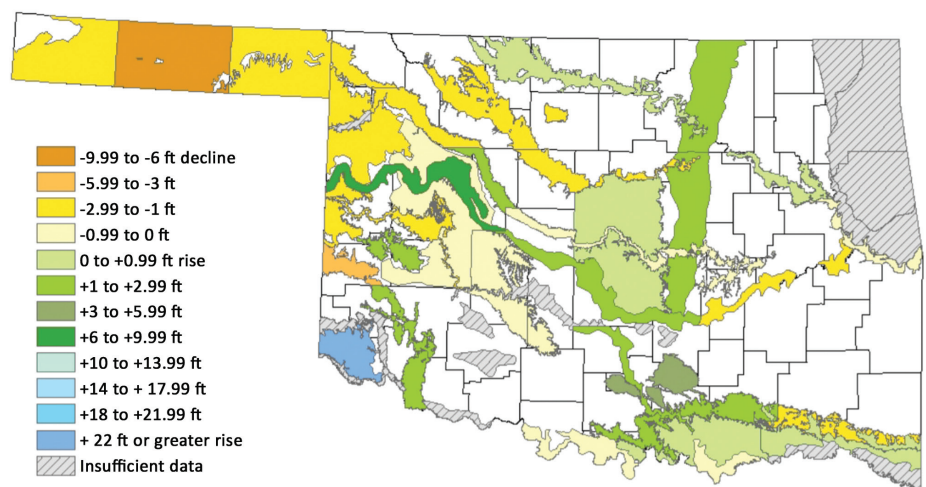
A sub-set of wells from the baseline monitoring network is being evaluated multiple times per year to identify trends and usage over time. To further facilitate this effort, a select number of wells have been equipped with water level data loggers to monitor changes on the scale of weeks, days, or even hours.

For more information about the program and a look at the latest GMAP report, visit www.owrb.ok.gov/GMAP. 💧

GMAP Monitoring Network



Average Five-year Water Level Change



Average five-year water level change by major aquifer and climate division (2012-17), developed by GMAP. Over the last five years, average water levels have exhibited a range of responses across the state. The largest groundwater level increases were observed in the karst bedrock aquifers: Arbuckle-Simpson and Blaine. The largest average declines were detected in the Ogallala-Panhandle in Texas County and the section of the North Fork of the Red River located in the West Central climate division. This map is one example of the numerous products created by GMAP that can be utilized by water resources managers and planners to make informed decisions that affect the sustainability of their water supplies.

Fixing simple water leaks can save homeowners

10%

on their water bills.

The average household's leaks account for more than

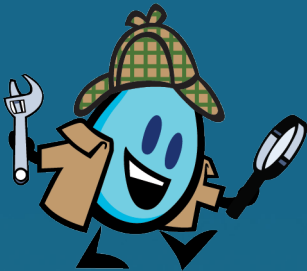
10,000

gallons of water wasted every year.

Ten percent of homes have leaks that waste

90

gallons or more per day.



BE A LEAK DETECTIVE!

SOMETIMES THE SOURCE OF A LEAK IS OBVIOUS,
BUT MORE OFTEN YOU HAVE TO SEARCH FOR THE SIGNS.



DO YOU HAVE A LEAK?

Take a look at your water usage during a colder month, such as January or February. If a family of four exceeds 12,000 gallons per month, there are serious leaks.

Check your water meter before and after a two-hour period when no water is being used. If the meter changes at all, you probably have a leak.



WHERE TO LOOK FOR LEAKS

Examine faucet gaskets and pipe fittings for any water on the outside of the pipe.

Check the pressure relief valve on the hot water tank.

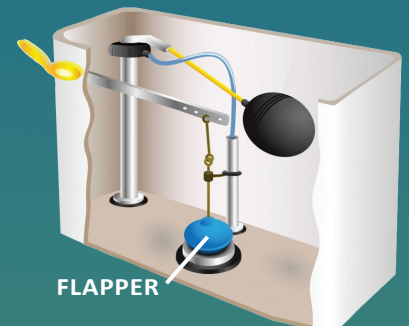
Sometimes these valves are plumbed directly into a drain and may be leaking without your knowledge. If you can't remove the drain pipe, listen for the hissing sound that indicates a leak.



DON'T FORGET THE TOILET!

Identify toilet leaks by placing a drop of food coloring in the toilet tank and wait 10 minutes. If any color shows up in the bowl, you have a leak. Be sure to flush immediately after the experiment to avoid staining the tank.

Turn off the water at the supply line before removing tank parts, and remember to take old toilet parts with you to the home improvement store.



Old or worn-out toilet flappers (valve seal) can cause leaks. Flappers are inexpensive rubber parts that can build up minerals or decay over time. Replacing them every 3-5 years can be a quick and easy fix for your water woes. Use of chlorine products in the tank may decrease the life of your flapper.

If the handle needs to be jiggled to keep the toilet from running, the flush level bar and chain (or the handle itself) may be sticking. Adjust the nut that secures it in the toilet tank. If that does not work, the handle may have to be replaced.

Charles Darby Appointed to Board



Charles Darby

In late January, Governor Mary Fallin appointed Charles Darby of Broken Bow to the Oklahoma Water Resources Board. Darby replaces Richard Sevenoaks of Tulsa, who served on the Board for almost 20 years.

Darby has been actively involved in community and civic affairs for many years, serving on the Broken Bow City Council from 1991-1997 and as Mayor from 1993-1997. Since 1999, Darby has been on the Board of Trustees for the E.T. Dunlap Higher Education Learning Center, serving as Chairperson since 2003. He currently serves on the McCurtain County Emergency Management Services Board of Trustees, McCurtain County E-911 Board of Trustees, and Southeastern Oklahoma Services For Family Violence

Intervention Board of Directors, and is the contact and administrator for the Emergency Food and Shelter Program/United Way for McCurtain County. He has been a full time pastor for thirty years, serving in churches both in Texas and in Oklahoma and as the Senior Pastor of Faith Christian Center in Broken Bow for the last 23 years. ♦



1st Quarter, 2017

The Oklahoma Water News is published quarterly by the Oklahoma Water Resources Board as authorized by Julie Cunningham, Executive Director. The Water News is available online at www.owrb.ok.gov. Follow us on twitter @OKWaterBoard for publication notification. For questions, comments, or article submissions, please contact Darla Whitley, Editor, at pubinfo@owrb.ok.gov or (405) 530-8800.

FINANCIAL ASSISTANCE PROGRAM UPDATE

Loans & Grants Approved as of March 31, 2017

FA Loans—368 totaling \$958,885,000

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.

CWSRF Loans—294 totaling \$1,338,731,092

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—179 totaling \$ 1,014,228,300

The Drinking Water State Revolving Fund (DWSRF) loan program is an initiative of the OWRB and ODEQ 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—652 totaling \$57,713,636

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

Emergency Grants—570 totaling \$33,918,163

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—10 totaling \$1,543,848

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 proceeds to fund the Program.

Water for 2060 Grants—4 totaling \$1,500,000

Through the Water for 2060 Grant Program, funding is available for municipalities, counties, water/sewer districts and other public entities for projects that highlight the responsible use of water.

Total Loans/Grants Approved: 2,077 totaling \$3,406,520,040

Estimated Savings: \$1,161,269,483

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.**

The Oklahoma Water Resources Board meets monthly. Meetings are open to the public. Visit www.owrb.ok.gov for meeting dates/times, locations, and agendas.

Linda Lambert, Chairman • Ford Drummond, Vice Chairman • Jason Hitch, Secretary
Stephen Allen • Tom Buchanan • Charles Darby • Bob Drake • Marilyn Feaver • Ed Fite

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.