

# OKLAHOMA Water News

2nd Quarter 2018

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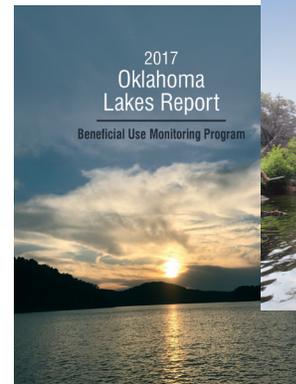
## 2017 Beneficial Use Monitoring Program Reports Now Available

The OWRB's 2017 Beneficial Use Monitoring Program (BUMP) reports of statewide water quality data for lakes, streams, and groundwater are now available online at [www.owrb.ok.gov/BUMP](http://www.owrb.ok.gov/BUMP).

The BUMP Lakes and Streams reports feature summaries of physical, chemical, and biological data obtained through sampling at approximately 130 lakes and 84 stream sites throughout the state, including an assessment of beneficial use impairments or threats for each site. The online version contains summary pages listed by stream site or lake site with links to downloadable data. Agency monitoring staff sample rivers in the network annually and lakes on a three-year rotation.

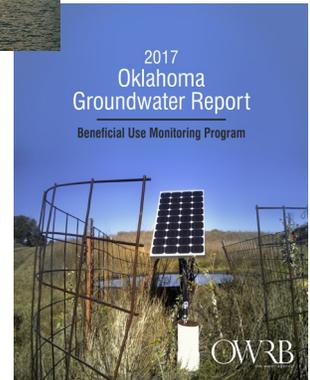
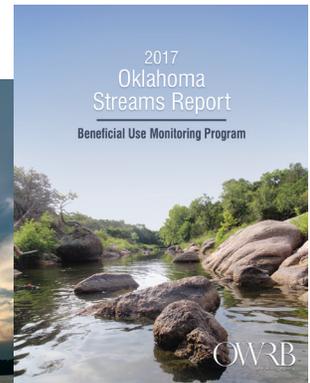
Data gathered in the 2016-17 sample year indicate that the major water quality concerns of Oklahoma lakes continue to be excess nutrients and turbidity. Data also indicate that 23% of the lakes sampled in 2016-17 were "hyper-eutrophic," which means they contain an excessive amount of nutrients that could lead to taste and odor problems (see map on page 2). In improving order of quality, about 49% of lakes sampled in 2016-17 were considered eutrophic, 26% were mesotrophic, and 2% were oligotrophic (waters relatively low in nutrients).

(continued on page 2)



*The 2017 BUMP Streams and Lakes reports feature summaries of physical, chemical, and biological data obtained through sampling at 84 stream sites and 130 lakes across the state.*

*The 2017 BUMP Groundwater Report features water level and water quality information for the state's 22 major aquifers.*



## From the Director

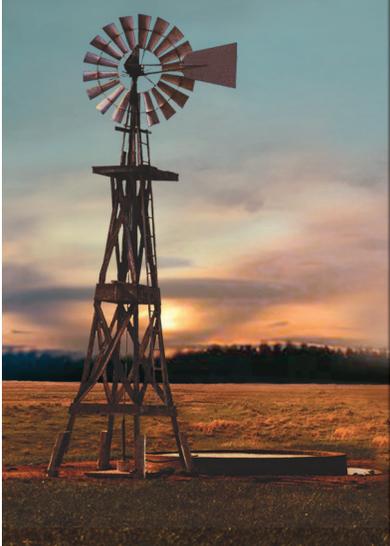
I am extremely pleased to report that Oklahoma's water future looks even brighter thanks to the leadership of Governor Fallin, the state Legislature, local and private interests, our Board, and our hard-working staff. Several significant pieces of legislation recently signed into law will allow the permitting of marginal waters for beneficial use, establish greater flexibility in water supply management and delay potential expenditures by groundwater users, protect existing water wells from encroachment by new well construction, and allow the use of aquifers to store water for later use.

One way to preserve our future fresh water supplies is to increase the safe and responsible use of marginal quality water when economically feasible. Representative Weldon Watson authored legislation that could greatly expand the use of these waters in lieu of fresh water. House Bill 3405 adds marginal quality waters (groundwater with 5,000 to 10,000 ppm of total dissolved solids) to Oklahoma Groundwater Law. This will provide the oil

(continued on page 2)



Julie Cunningham, Executive Director  
Oklahoma Water Resources Board



2017 BUMP Reports (continued)

The vast majority of streams sampled within the past year were suitable for uses related to public and private water supply. The Fish and Wildlife Propagation beneficial use was mainly affected by high inorganic turbidity and elevated metals levels. Inorganic turbidity is typically caused by increased sediments loads from runoff and highly erodible banks. Bacteria levels were the major concern for the Primary and Secondary Body Contact Recreation beneficial use. A small number of sampled streams also had problems associated with dissolved solids (chlorides and sulfates), which limits their suitability for irrigation.

The Groundwater Report contains summaries of aquifers sampled through the Groundwater Monitoring and Assessment Program (GMAP). GMAP was established in 2013 as the state's first comprehensive groundwater quality and quantity monitoring program. A network of approximately 660 wells in Oklahoma's 22 major aquifers was sampled over five years for baseline assessment along with approximately 65 wells in associated minor aquifers. The summaries show nutrient, mineral, and metal statistics as well as general parameters, such as depth to water, alkalinity, hardness, and total dissolved solids (TDS). Groundwater level hydrographs show average depth to water over the longest period of record.

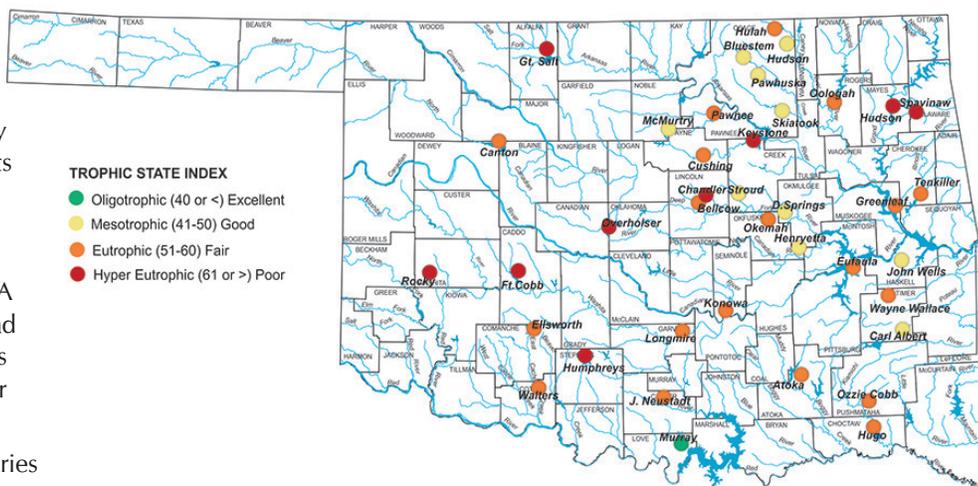
From the Director (continued)

and gas and power generation industries, as well as irrigators and others, the opportunity to tap into these supplies while offsetting their use of fresh water. The OWRB will commence a rule-making process this fall to update the state's water well construction standards for these types of marginal quality wells so that fresh water zones are protected.

The Legislature and Governor also approved legislation that provides OWRB planners with greater flexibility in appropriating groundwater basin supply management. Senate Bill 1294, authored by Senator Roland Pederson, grants the OWRB the flexibility to delay or gradually phase in a Maximum Annual Yield determination when the amount of water allocated from a basin is 25% or less of the total amount of water in the basin. The new law also extends well spacing protections to all existing water wells.

In addition to these legislative initiatives, significant changes to OWRB rules were successfully promulgated this session. Among other rule amendments, the OWRB proposed a new chapter, OAC 785, Chapter 32, Aquifer Storage and Recovery, which sets out requirements to obtain a permit to conduct aquifer storage and recovery activities and details procedures for determining the amount of stored water that may be later

OWRB SAMPLE LAKES  
SAMPLE YEAR 2017



*Trophic status of lakes sampled by BUMP in 2017. Trophic status is a measure of biological productivity, a major determinant of water quality. Excessive levels of nutrients can lead to low dissolved oxygen and algal growth, which can cause taste and odor problems.*

*“Oligotrophic” lakes have low primary productivity and/or low nutrient levels, “mesotrophic” lakes have moderate primary productivity and nutrient levels, “eutrophic” lakes have high primary productivity and nutrient levels, and “hypereutrophic” lakes have excessive primary productivity and nutrient levels.*

Information provided by the program plays an important role in supporting the management of state water resources. It is estimated that Oklahoma's aquifers store approximately 386 million acre-feet of groundwater, which supplies thousands of municipalities, rural water districts, industrial facilities, and agricultural operations. 💧

recovered. This is another critical step in continuing the state's work on a comprehensive aquifer storage and recovery program. Also of note, OAC 785, Chapter 50 was amended to make it easier for applicants to find and review the emergency grant rules.

I would like to extend my appreciation to Legislative leaders, Governor Fallin, Secretary Teague, and the many citizen stakeholders for their collaboration and input on these measures. Without the input of a broad and diverse group of policy makers, industry leaders, and our colleagues at the ODEQ and other sister agencies, none of these successes would have been possible.

Turning to internal matters, at the May Board meeting, we welcomed new Board members Jennifer Castillo, an attorney with Oklahoma Gas & Electric Company, and Matt Muller, a farmer in Jackson and Greer counties. Chairman Drummond also recognized the successes of retiring Board members, Linda Lambert and Tom Buchanan. Former Chairman Lambert, who was in attendance, thanked the board and staff and reminded us that our work is a calling. She underscored the importance of major legislation passed during her time on the Board,

*(continued on page 3)*

*From the Director (continued)*

particularly the passage of the Water for 2060 Act, and urged us continue making water conservation a priority.

In June, the Board elected a new slate of officers. Jason Hitch will serve as Chairman, Stephen Allen will serve as Vice Chairman, and Robert Stallings will serve as Secretary. I also announced the appointment of Sara Gibson as our permanent General Counsel. Sara has served the OWRB since 2013 as Assistant General Counsel. Her diverse knowledge and experience with administrative law and state water programs have served the OWRB well and we look forward to her leading our legal team.

Finally, the 39th Annual Governor’s Water Conference will be held on December 5-6 at the Reed Conference Center in Midwest City, Oklahoma. Please mark your calendar and plan to attend this event. We are putting together an exciting agenda with a special focus on projects to further the state’s Water for 2060 goal. We are planning a special plenary forum to kick off a state-wide awareness campaign for Water for 2060. This will include the second annual Water for 2060 Excellence Awards ceremony. To kick off the networking reception, a fun speed-mentoring session is in the works. It will be a wonderful opportunity to discover and share all the many efforts that are being made across the state to conserve and protect our water resources for future generations. ♠

**SAVE THE DATE**

39<sup>th</sup> Annual Oklahoma Governor’s Water Conference and Research Symposium

**December 5-6, 2018**

Reed Conference Center  
Midwest City, Oklahoma

***Sara Gibson Appointed as OWRB General Counsel***

Sara Gibson, who has been serving as the Interim OWRB General Counsel, was permanently appointed to the position in July. Sara is a 2004 graduate of Oklahoma City University School of Law. She joined the OWRB in 2013 as Assistant General Counsel. Her duties at the agency have included acting as hearing examiner on behalf of the OWRB, advising the agency on the development of Water Quality Standards, and rulemaking. Prior to joining the OWRB, Sara served as an attorney for the Oklahoma Department of Environmental Quality and the Oklahoma Tourism and Recreation Department. ♠



**WATER FOR 2060**  
EFFICIENCY • CONSERVATION • RECYCLING • REUSE

**EXCELLENCE AWARDS**

Nominations open through September 28, 2018.  
[www.owrb.ok.gov/2060/award.php](http://www.owrb.ok.gov/2060/award.php)

The Water for 2060 Excellence Award program was developed to recognize individuals and entities that make exceptional contributions to the promotion and implementation of water use efficiency and conservation of Oklahoma’s fresh water resources. Categories include Public Water Supply, Energy and Industry, and Crop Irrigation/Agriculture Production.

Award winners will be acknowledged at the annual Oklahoma Governor’s Water Conference on December 5, 2018.

# 10 Things You Can Do To Prevent Stormwater Runoff Pollution

Water for 2060 is Oklahoma's statewide goal of using no more fresh water in 2060 than was used in 2010. In addition to conserving and reusing our water to meet this goal, this also means protecting our fresh water supplies from pollution.

## Nonpoint Source Pollution

The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands traps rainwater and snowmelt and allows them to filter slowly into the ground. In contrast, impervious (nonporous) surfaces like roads, parking lots, and rooftops prevent rain and snowmelt from infiltrating, or soaking, into the ground. Most of the rainfall and snowmelt remains above the surface, where it runs off rapidly in unnaturally large amounts.

Urbanization increases the variety and amount of pollutants carried into streams, rivers, and lakes. These pollutants can include the following:

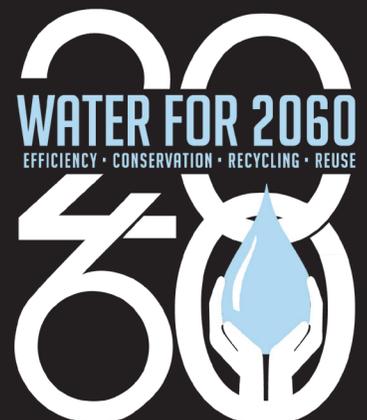
- Sediment;
- Oil, grease, and toxic chemicals from motor vehicles;
- Pesticides and nutrients from lawns and gardens;
- Viruses, bacteria, and nutrients from pet waste and failing septic systems;
- Road salts;
- Heavy metals from roof shingles, motor vehicles, and other sources;
- Thermal pollution from dark impervious surfaces such as streets and rooftops.

These pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water supplies, and make recreational areas unsafe and unpleasant.

For more information, visit [www.epa.gov/nps](http://www.epa.gov/nps) or [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater).

Did you know that because of impervious surfaces like pavement and rooftops, a typical city block generates more than 5 times more runoff than a woodland area of the same size?

- 1 Use fertilizers sparingly and sweep driveways, sidewalks, and roads instead of using the hose.
- 2 Never dump anything down storm drains.
- 3 Vegetate bare spots in the yard.
- 4 Compost yard waste instead of throwing it away.
- 5 Avoid pesticides in favor of integrated pest management (IPM).
- 6 Direct downspouts away from paved surfaces.
- 7 Take cars to the car wash instead of washing in the driveway.
- 8 Check cars for leaks and recycle motor oil and antifreeze when changing fluids.
- 9 Inspect and pump septic tanks regularly.
- 10 Pick up pet waste.



# FINANCIAL ASSISTANCE PROGRAM UPDATE

Loans & Grants Approved as of June 30, 2018

## FA Loans—387 totaling \$1,079,880,000

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—323 totaling \$1,585,894,377

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—198 totaling \$1,250,308,800

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—681 totaling \$60,362,051

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.

## Drought Response Program Grants—6 totaling \$418,848

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.

## Emergency Grants—578 totaling \$34,366,720

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.

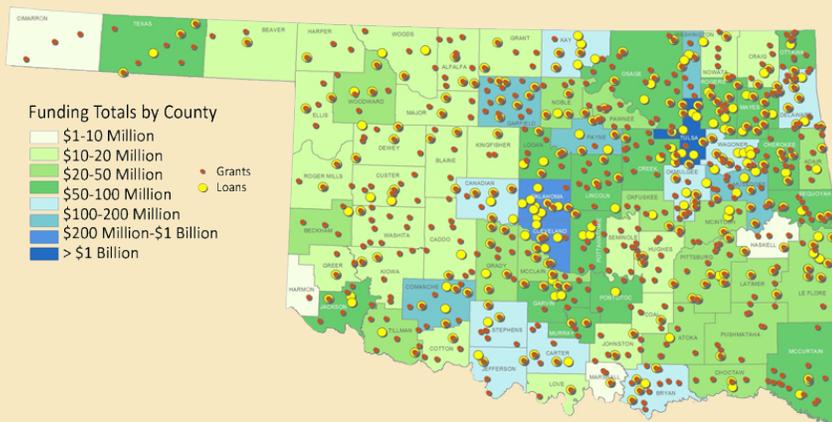
## Water for 2060 Grants—4 totaling \$1,500,000

Through the Water for 2060 Grant Program, funding was available in 2015 for municipalities, counties, water/sewer districts and other public entities for projects that highlight the responsible use of water.

## Emergency Drought Relief Grants—4 totaling \$1,125,000

Through the Emergency Drought Relief Grant Program, funding was provided in 2013 by the Legislature via the Emergency Drought Relief Commission to address severe drought issues in specific Oklahoma counties.

## OWRB Financial Assistance Program Loan and Grant Recipient Status by County



## Total Loans/Grants Approved: 2,181 totaling \$4,013,855,795 Estimated Savings: \$1,350,815,667

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).



Oklahoma Water Resources Board

Jason Hitch, Chairman

Stephen Allen, Vice-Chairman

Robert Stallings, Secretary

Jennifer Castillo

Charles Darby

Bob Drake

Ford Drummond

Robert Melton

Matt Muller

*The Oklahoma Water Resources Board defines policy and conducts the state's water business through a nine-member Board appointed by the Governor. The Board meets regularly to oversee the management of the state's water resources and implementation of the Oklahoma Comprehensive Water Plan. The agency assists the Board in implementing its mission with a professional staff of 100 scientists, engineers, financial analysts, water policy experts, attorneys, and support personnel.*

*The mission of the OWRB is to protect and enhance 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.*

*OWRB meetings are open to the public. Visit [www.owrb.ok.gov](http://www.owrb.ok.gov) for meeting dates, times, locations, and agendas.*

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