# OKLAHOMA Jater Dews 4th Quarter 2017

OWRB Initiates Annual Water for 2060 Excellence Awards

2017 Annual Report of OWRB Programs & Initiatives

Water Use Appropriation Water & Wastewater System Financing

Hydrologic Investigations
Water Quality Standards
Water Quality & Quantity
Monitoring & Lake Restoration
Projects

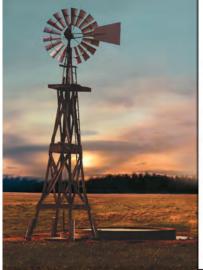
Well Driller & Pump Installer Licensing

Dam Safety & Floodplain Management

Water for 2060

Water Resource Mapping Legal Update OWRB Partnerships

Drought Update FAP Update



# OWRB Initiates Annual Water for 2060 Excellence Awards

The inaugural Oklahoma Water for 2060 Excellence Awards ceremony was held during the 38th Annual Oklahoma Governor's Water Conference on November 1, 2017. The 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 for the Crop Irrigation and Agriculture Production, Energy and Industry, and Public Water Supply sectors. The awards support Oklahoma's Water for 2060 Act and the recommendations of a special advisory council to Governor Mary Fallin and the Oklahoma Legislature. Winners included

Jimmy Emmons, the Long Family Farms Partnership, Koch Fertilizer, Newfield Exploration Company, Continental Resources, OG&E, the City of Oklahoma City, and the City of Edmond.

# CROP IRRIGATION & AGRICULTURE PRODUCTION

## **Jimmy Emmons**

Jimmy Emmons, a third generation farmer in Leedey, was recognized for discovering and sharing methods for combating increasing irrigation and synthetic fertilizer needs through conservation and no-till farming. Starting in 2012, with technical assistance from USDA-NRCS soil scientist Steve Alspaugh, Jimmy

(continued on page 2)



Ginger and Jimmy Emmons, winners of the 2017 Water for 2060 Excellence Award for Crop Irrigation and Agriculture Production. Presenting the award on behalf of Governor Mary Fallin are Jim Reese, Secretary of Agriculture (far left) and Julie Cunningham, OWRB Executive Director (far right).

# From the Director

I hope everyone had a wonderful holiday season in spite of the cold and dry weather conditions! Even though heavy rains earlier in the year put year-end totals well above average, the last three months of the year were extremely dry at 3.12 inches below average statewide.

The 2017 Governor's Water Conference and Research Symposium was attended by a diverse crowd of more than 450 individuals from industry, government, and academia. The theme was "Liquid Assets: The Value of Water Investment in Oklahoma," focusing on the importance of water to Oklahoma's economy.

During the Conference, we were pleased to present the first annual Water for 2060 Excellence Awards, a recommendation of the Water for 2060 Advisory Council, to recognize exceptional contributions to the promotion and implementation of water conservation, efficiency, and reuse initiatives. Even though no funding has been authorized to implement



Julie Cunningham, Executive Director Oklahoma Water Resources Board

(continued on page 2)

# From the Director (continued)

the Council's twelve recommendations, the OWRB is finding ways to make progress in meeting our goal of using no more fresh water in 2060 than was used in 2010. Additional efforts include feasibility studies by the Produced Water Working Group, the development of new groundwater rules to allow Aquifer Storage and Recovery programs, development of rules allowing communities to augment public water supplies through Indirect Potable Reuse, and the development of a Water for 2060 web portal for existing water conservation programs at the state, county, and local level (see details on page 6).

A special thanks goes out to our award winners, sponsors, speakers, and everyone who attended the 2017 Water Conference. I hope to see you next year!

This issue of the Oklahoma Water News contains the annual report of OWRB activities for 2017. The OWRB's hard-working and dedicated staff have focused their efforts on increasing and improving our services and products—in spite of declining state appropriations—through improved efficiencies and by seeking out federal and local partnerships and other funding opportunities. More of our 2017 accomplishments will be discussed in the following pages. ▶

# Water for 2060 Excellence Awards (continued)

experimented with small plots of cover crops following wheat to formulate a conservation plan that would improve the health of the soil and reduce input costs. Jimmy selected cover crops that were less water-intensive and good sources of nitrogen. The next year, soil tests and water use analyses showed positive results. In 2014, Jimmy's project expanded beyond 2,000 cropland acres to include 5,000 rangeland acres. In 2015, Jimmy further reduced his water usage by implementing a rotational grazing system so that his cattle herd fed on the cover crops. This reduced the amount of hay needed to feed the 200-head herd, and in turn, reduced irrigation requirements. Jimmy has taken the additional step of reaching out to other farmers and ranchers across the nation to advocate switching to a soil health based agriculture system to improve resiliency.

# **Long Family Farms Partnership**

The Long Family Farm has been in operation in Texas County since the early 1900s, producing corn, wheat, soybeans, sorghum, and sunflowers on 12,000 acres of farmland. Over the years, the Longs have become exemplary water stewards by adapting to new technology and farming methods, significantly reducing their water use while maintaining (and improving) crop production levels.

In the 1970s, the Longs were producing 100 bushels per acre of corn using flood irrigation, which provided uneven



Pat Long, Long Family Farms Partnership

soil coverage and had a high rate of evaporation. Today, the Longs produce an average of 220 bushels per acre using the center pivot with about 90% water efficiency. In 2012, the

# Congratulations to our 2017 Water Pioneers!

Glen Cheatham invested his professional career in water resource development, first as Port Manager at the Port of Muskogee and later as Manager of the Oklahoma Waterways Branch where he oversaw the McClellan-Kerr Arkansas River Navigation System for Oklahoma and obtained funding for Montgomery Point Lock and Dam, which now serves to protect the navigation system and strengthen its resiliency.

Jim Townsend served in the Oklahoma House of Representatives from 1964-1980, serving as majority floor leader from 1975-1978. The legislation he is most well-known for is the 1970 Scenic Rivers Act, which resulted in special protective status for the Illinois River, Flint Creek, Barren Fork Creek, Lee Creek, Little Lee Creek, and the Upper Mountain Fork River.

Pete White served as a City Councilman and led the reorganization of the Oklahoma City Water Utilities Trust, which was given Standard and Poor's and Moody's highest bond ratings, placing it in the top 5.5% of nationwide water and wastewater utilities. Mr. White also played an important supporting role in the Water Rights Settlement between Oklahoma City, the State of Oklahoma, and the Chickasaw and Choctaw Nations.

Longs began growing genetically modified drought resistant corn and installed high tech monitoring systems on their center pivots that send out notifications if a sprinkler malfunctions. In 2014, the Longs converted all of their irrigated acres to no-till farming for soil health and water conservation, which increased the number of acres irrigated per well and doubled their yields.

### **ENERGY & INDUSTRY**

#### **Koch Fertilizer**

Koch Fertilizer's Enid facility, one of the largest fertilizer production plants in North America, is undergoing an expansion that will increase its daily water needs from four million gallons per day to six million. Working with the City of Enid, Koch implemented a strategy to lessen



Michael Teague, Secretary of Energy and Environment (left), and Julie Cunningham, OWRB Executive Director, present the Water for 2060 Excellence Award to Marc Hoss, Koch Fertilizer Enid facility plant manager.

the burden of additional water usage requirements on the city's water supply. Installation of new technology will allow Koch to use treated wastewater instead of drinking water for the majority of its water needs. The City of Enid and Koch Fertilizer are working together on minor improvements so the full amount of wastewater can be used by Koch, dropping the total potable water demand to around 1 million gallons per day or less.

(continued on page 7)

# 2017 Annual Report of OWRB Programs & Initiatives

Water is essential for Oklahoma. Oklahoma's economic future and quality of life depend on it. With an estimated 390 million acre-feet of water stored in major groundwater basins, more than 15 million acre-feet of storage in major reservoirs, and 170,000 miles of rivers and streams, Oklahoma is a water rich state with the resources to support agriculture production, municipal development, business and industry, outdoor recreation, and so much more.

Management of the state's water resources presents many challenges, including competition among users, distribution of supplies, and shortages during periods of extended drought. The OWRB remains focused on ensuring a reliable supply of clean water for all Oklahomans through its agency programs and initiatives.

# **Water Use Appropriation**

Oklahoma's fresh water resources are managed by the OWRB through more than 13,000 permits for 6.7 million acre-feet of water per year for public water supply, agriculture, industry, power generation, recreation, and oil and gas drilling. Approximately 1,500 provisional temporary permits are issued each year for oil and gas developers or others in need of a temporary (90-day) source of water. The agency coordinates statewide water use reporting, manages shortages during times of drought, and responds to public complaints.

In 2017, OWRB staff issued 102 groundwater and stream water permits for a total of 245,006 acre-feet and 1,775 provisional temporary permits. The agency manages a total of 13,035 active permits for 2.9 million acre-feet of surface water and 3.8 million acre-feet of groundwater.



OWRB permitting specialist Kelsey Bowman assists with the permit application process.

# Water & Wastewater System Financing

As the State's primary water and wastewater infrastructure financing agency, the OWRB has provided more than \$3.8 billion in financing to Oklahoma communities, rural water districts, schools, and other authorities at an estimated savings of \$1.3 billion over conventional financing. This is due, in part, to the continued achievement of a AAA bond rating by S&P on the basis of the Board's innovative

management of the programs. The programs protect the health and safety of Oklahomans by providing funding to the meet the critical need for safe drinking water supplies and adequate wastewater treatment. For each federal dollar invested, the programs provide an average of 3.5 dollars in infrastructure financing with 100 percent of the costs funded through administrative fees.



OWRB financial analysts Charles de Coune and Tonya White meet with the Okemah Utilities Authority to discuss financing opportunities through OWRB loan programs.

In 2017, the OWRB approved 36 loans and 14 grants totaling \$288.5 million to fund public water/wastewater infrastructure improvements with an estimated savings of approximately \$38.2 million as compared to traditional financing.

In cooperation with the Oklahoma Rural Water Association (ORWA), 68 training sessions and 254 technical assistance visits were provided to communities across Oklahoma.

# **Hydrologic Investigations**

The OWRB conducts statutorily required hydrologic investigations to determine the amount of water available for allocation. Hydrogeologists, modelers, private engineering consultants, and federal agencies assist the OWRB in characterizing hydrologic properties of aquifers such as recharge, effects of groundwater pumping, water demand, and contaminant flow paths.

In 2017, the OWRB completed a 20-year update of the Enid Isolated Terrace. In support of the Upper Washita River Basin project, the Rush Springs study is scheduled to

(continued)



OWRB Geologist Chris Neel meets with Enid city officials and members of the Northwest Action Plan (NWAP) to present results of the Enid Isolated Terrace hydrologic investigation.

be completed by early 2018. Twenty year updates of the Elk City Sandstone and the Gerty Sand aquifers, as well as an investigation into the Cimarron Alluvium and Terrace aquifer, are underway.

Through contracts with the US Geological Survey, the OWRB completed the Canadian River and North Fork of the Red River studies. Investigations are underway on the Roubidoux, Salt Fork of the Red River, and Washita River Reach 1 aquifers.

The OWRB continues collaborative work with the US Bureau of Reclamation (USBR), Foss Reservoir Master Conservancy District (MCD), and Fort Cobb MCD on the Upper Washita Basin Study, scheduled for completion in 2018. The OWRB is also collaborating with the USBR on the Upper Red River Basin Study, scheduled for completion in 2018.

Dependable Yield studies of three sole-source supply lakes for the communities of Hominy, Langston, and McAlester Army Ammunition Plant will be completed in the spring of 2018. The OWRB performed bathymetric studies (lake floor contours) to get an accurate volume of the lakes at any water level. CH2M engineers, funded in part by the US Army Corps of Engineers Planning Assistance to States grant, used this data and OWRB historical use reports to estimate the amount of water these communities can rely upon in the worst drought on record to plan their future projects accordingly.

# **Water Quality Standards**

The OWRB promulgates Oklahoma's Water Quality Standards by designating beneficial uses and developing water quality criteria to protect these uses, developing antidegradation policies, and developing and implementing rules, including use support protocols. In 2017, the OWRB and other members of the Oklahoma-Arkansas Scenic Rivers Joint Phosphorus Study Committee completed a study to determine the total phosphorus threshold response level at which algae production results in undesirable or harmful conditions. After a series of meetings and the release of the final study report, the six-member study committee reached a consensus on recommendations, which were reviewed and approved by the states' governors.

Proposed amendments to Oklahoma's Water Quality Standards included a comprehensive revision of Oklahoma's groundwater quality standards, including an updated antidegradation policy and inclusion of a new Domestic Untreated Water Supply beneficial use. Numeric and narrative criteria were created to protect groundwaters used for drinking water supplies that may be utilized for aquifer storage and recovery or other artificial recharge activities.

# Water Quality & Quantity Monitoring & Lake Restoration Projects

The OWRB administers Oklahoma's water monitoring network to track the water quality and quantity of Oklahoma's streams, lakes, and groundwater basins. Scientifically defensible data collected are used to assist businesses, governments, and citizens in making water resources decisions, improve understanding of the effects of drought and usage patterns, identify areas of impairment, and refine Oklahoma's Water Quality Standards. Staff limnologists work with municipalities to complete lake sedimentation studies, capacity yield determinations, and restoration projects.

Sampling was conducted quarterly at 165 Beneficial Use Monitoring Program sites on 39 Oklahoma lakes in 2017 (as part of a five-year rotation for 130 lakes) and at 32 lakes as part of the National Lakes Assessment program. Stream sampling was conducted at 84 stations on a 6-week rotation. Fish distribution data collected at nearly 400 sites across the state are now available through an interactive GIS data viewer.

Baseline sampling for the Groundwater Monitoring and Assessment Program includes 750 water quality monitoring sites and more than 1,000 water-level recording sites in all major aquifers. The program will now enter a long-term trend monitoring phase.

Additional monitoring projects during the year included the assessment of baseline characteristics of riverine and oxbow lakes, watershed stormwater monitoring at Lake Thunderbird, watershed monitoring at Lake Arcadia, bathymetric mapping, and real-time monitoring in the Grand/Neosho River Watershed.

Cooperative work with Oklahoma City and the Department of Wildlife Conservation at Lake Stanley Draper continued

to develop beneficial aquatic plant communities and control invasive plants. The OWRB also continued to work cooperatively with the Central Oklahoma Master Conservancy District to monitor and improve water quality in Lake Thunderbird.

# Well Driller & **Pump Installer Licensing**

The OWRB protects Oklahoma's groundwater from contamination by ensuring the integrity of water well construction through the licensing of well drillers and pump installers. OWRB staff also assist drillers with required well log reporting. As a result more than 176,000 well logs are available to the public via the agency's website through record searches and interactive maps.

In 2017, the OWRB cooperated with the Oklahoma Ground Water Association to conduct 14 continuing

education training sessions for drillers to meet licensing requirements. The sessions were attended by more than 80% of the state's licensed drillers. The OWRB continues to work with the Oklahoma Department of Environmental Quality to develop more uniformity in water well drilling rules.

# Dam Safety & Floodplain Management

Oklahoma's 34 largest reservoirs provide 15 million acrefeet of water storage capacity, essential during times of drought and flooding. The OWRB coordinates the Oklahoma Dam Safety Program to ensure the safety of more than 4,700 dams and the Floodplain Management Program to assist more than 400 communities in reducing costly flooding risks to life and property.

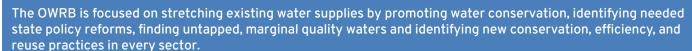
In 2017, the OWRB approved 16 applications to construct/repair/modify dams. Staff worked with dam

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With the Legislature's passage of the Water for 2060 Act in 2012, prompted by a priority recommendation of the Oklahoma Comprehensive Water Plan, Oklahoma became the first state in the nation to establish a goal of consuming no more fresh water in 2060 than was consumed in 2010. To meet this ambitious goal, the Water for 2060 Advisory Council was convened in 2013 to study and recommend voluntary water conservation practices, incentives, and educational programs to promote wise water usage while supporting Oklahoma's population growth and economic development goals. In 2015 the Council submitted its 12 key recommendations with funding requirements to the Governor and



last fall with presentations to eight awardees at the Governor's Water Conference. The Board has also established a steering committee of water outreach and education entities to pool conservation information and resources into a Water for 2060 web portal.



# Produced Water Working Group

A Governor-directed multi-disciplinary Produced Water Working Group (PWWG) completed a high-level look at issues specific to reuse of produced water in Oklahoma. Economically feasible solutions included evaporation technologies and reuse of water within the oil and gas industry via a pipeline network. A final report with the results of the feasibility study will be published this summer.

# **Aquifer Storage & Recovery**

The OWRB has developed new groundwater rules due for legislative approval this session to allow entities to develop an Aquifer Storage and Recovery program within the state. Upon successful completion of the OWRB and ODEQ permitting process, an entity may store water by recharge of an aquifer with approved water to be recovered later for use in its water treatment plant. The amount of water available for recovery will be subject to an approved Site-Specific Aquifer Storage and Recovery Plan that will be updated annually via continued monitoring and reporting.

### Indirect Potable Reuse

The OWRB and the ODEQ continue to work in the Water Reuse Workgroup to develop rules for Indirect Potable Reuse (IPR). In 2018, the OWRB has proposed rules that implement the Sensitive Water Supply-Reuse antidegradation classification, and has assisted the ODEQ in developing new water quality permitting rules, which will allow for implementation of IPR in municipal reservoirs. The workgroup continues to tackle a variety of guidance and technical issues that are needed to fully implement IPR. •



owners to reach over a 90% completion rate of updated Emergency Action Plans in case of a dam breach. OWRB staff provided breach inundation maps and inspection reports to 25 low hazard-potential dam owners. OWRB dam safety workshops were attended by more than 300 real estate agents and 50 engineers.

The OWRB worked closely with communities throughout the state in 2017 to identify flood risks and update flood maps through FEMA's Cooperating Technical Partners program. Staff conducted 5 new Community Assistance Visits and 50 Community Assistance Contacts.

# **Water Resource Mapping**

The OWRB provides water-related information through the interpretation of spatial data using standard and customized GIS applications.

In 2017, OWRB GIS staff created a new map viewer showing the details of fish collections at nearly 400 stream monitoring sites over a 13-year period. GIS staff also updated existing OWRB map viewers with a new format and added data from three additional lakes to the *Lakes of Oklahoma* map viewer. Progress continued on a project to map water, wastewater, stormwater, and water reuse infrastructure for small public water and wastewater systems and to make that data available to the systems on a secure map viewer.

# Legal Update

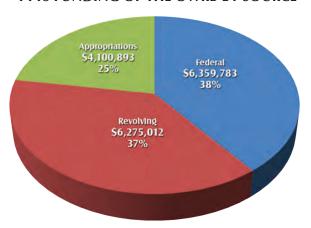
In September 2017, the state's implementation of Senate Bill 288 was upheld by Court of Civil Appeals, affirming the OWRB order setting the Maximum Annual Yield (MAY) at 0.2 acre-feet per acre for the Arbuckle-Simpson Groundwater Basin. Passage of SB 288 in 2003 prohibited the OWRB from issuing groundwater permits that would reduce the "natural flow" of springs and streams draining "sensitive sole source" groundwater basins. This is the first act of the Oklahoma Legislature to address a connection between groundwater and stream water in groundwater rights administration in Oklahoma.

In October, the OWRB approved the permit to authorize transportation of water out of the Kiamichi River stream system for use in Oklahoma City. Pursuant to the terms of the permit, Oklahoma City will release water currently held in Sardis Reservoir, where it will travel to one of four authorized diversion points on the Kiamichi River in Pushmataha County to be transported to Oklahoma City. The OWRB's administrative order has been appealed to the District Court of Pushmataha County. The authorized interbasin transfer was the subject of last year's tribal water rights settlement between the Choctaw and Chickasaw Nations, State of Oklahoma, and Oklahoma City that was designed to protect existing area recreational and ecological uses.

# **OWRB Partnerships**

The OWRB actively seeks collaborative funding and technical assistance opportunities. Current projects include data management, storage and dissemination activities, basin scale hydrologic studies, regional planning efforts, municipal reservoir capacity and restoration studies, and tailrace studies. Partners include the Grand River Dam Authority, City of Norman, Central Oklahoma Master Conservancy District (MCD), Mountain Park MCD, Fort Cobb MCD, Oklahoma Department of Environmental Quality, Oklahoma Conservation Commission, Groundwater Protection Council, US Geological Survey, US Army Corp of Engineers, US Bureau of Reclamation, US Environmental Protection Agency, US Agricultural Research Service, US Department of Agriculture Natural Resources Conservation Service, and others.

### **FY18 FUNDING OF THE OWRB BY SOURCE**



### **OUR MISSION**

The mission of the Oklahoma Water Resources Board 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.

The OWRB received its fifth consecutive "Top Workplaces" award for 2017. The Top Workplaces program recognizes Oklahoma's best employers based entirely on employee opinions gathered through anonymous surveys. The OWRB was also given its second certified healthy business award for its efforts to keep employees active and healthy.





# **Newfield Exploration**

Newfield Exploration Company's Barton Water Recycling Facility is located in the STACK play of the Anadarko Basin. The facility is a multi-million dollar investment that will connect to seven pits with nearly 6.5 million barrels of storage capacity utilizing more than 70 miles of underground pipeline by the end of 2017. The facility reduces the amount of fresh water needed by extending the life cycle of each barrel of water produced in operations through recycling and reuse. The facility was constructed to handle



Reed Durfey, Newfield Exploration

nearly 100 percent of the area's produced and flowback water. Newfield has invested more than \$40 million to date in water management infrastructure in its STACK play. Recycling flowback and produced water ensures more fresh water stays at its source for other community uses. The Barton facility is expected to recycle produced water for years to come, leading to continued water savings for Newfield and the community.

#### **Continental Resources**

Continental Resources operates four recycling facilities in the SCOOP and STACK Plays, and can recycle 4.2 million gallons of water per day (with a peaking capacity of 10.5 million gallons per day) total at these facilities. Since its inception in 2013, Continental's efforts have resulted in approximately 588,000,000 gallons of recycled water. Continental's ultimate goal is to reduce its fresh water use by approximately 50% within the service areas of its recycling facilities. Additionally,



Anthony Luvera, Continental Resources

Continental is working with the Oklahoma Corporation Commission and other producers to make available its recycling facilities when capacity is available, further reducing the industry's fresh water footprint. Continental continues to work toward identifying and exploring emerging technologies, multi-sector water sharing opportunities, and potential sources of marginal quality waters that might prove suitable for industry operations.

### OG&E

The Low Volume Wastewater Reuse Project at OG&E's Mustang Station in Oklahoma City reflects a commitment to the responsible use of natural resources, including the use of water for power production. In 2013, the OG&E Mustang Station began refining the plant's wastewater treatment process. The goal was to reuse as much water as possible, thereby alleviating stress on existing fresh water supplies. OG&E initiated reuse of in-plant low volume wastewater (LVW) as a source of cooling tower makeup water. A pump and associated controls were added to the LVW pond, and piping was installed to connect to a cooling tower supply

line. This simple but innovative system now allows wastewater, previously discharged to a treatment plant, to be used as recirculated cooling water. By the end of 2016, Mustang Station LVW project had resulted in saving approximately 21 million gallons of fresh water.

### **PUBLIC WATER SUPPLY**

# City of Oklahoma City

Last July, the City of Oklahoma City adopted a Water Conservation Plan to provide guidance for the implementation



Tony Shook, OG&E

of individual water conservation and efficiency programs, to analyze and discuss the impact of current programs, and to prepare residents for drought conditions. The plan supports the statewide goal established in the Water for 2060 Act, which emphasizes education and incentives rather than mandates alone. Additionally the plan recommends a multifaceted

approach to reach all customer categories through expanded education and local partnerships to continue successful demand management and water use efficiency. The conservation program supports the adoption of water efficient technologies as well as behavioral changes to save water in homes and businesses. The adoption and implementation of the water conservation plan and individual strategies are an ongoing process that will be monitored for water savings and adjusted to ensure real water savings are achieved.



Malarie Gotcher, City of Oklahoma City

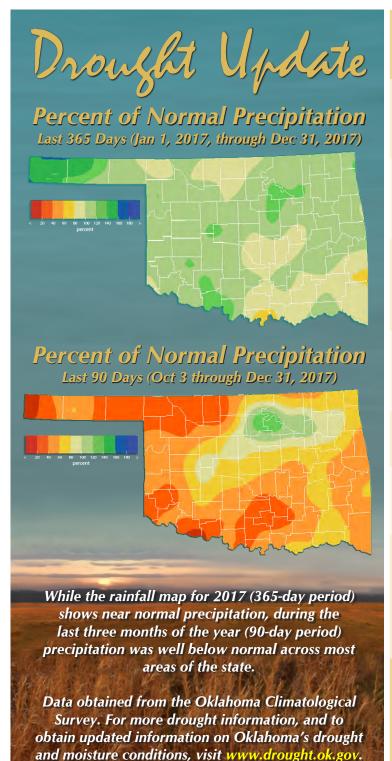
### City of Edmond

With a service area of approximately 80 square miles, the City of Edmond provides water to more than 84,000 customers. The City's population is projected to grow to more than 136,000 people by 2060. Water demand for the region is predicted to double. To accommodate the projected increase in demand, the City is doubling its water storage capacity with a new two-million-gallon elevated storage tank. The new storage tank has been designed and situated to work in conjunction with an existing pump station site and repurposed underground

storage tank to minimize water loss. As a general rule, water drained from a tower during times of low water usage or for tower maintenance and repair will be released or flushed into a storm drain. This new system allows the City to drain the entire volume of water from the tower into the underground storage tank when necessary and then recirculate that water back into the distribution system. As a result, the City estimates it can save a million gallons of water each year.



Earl Hall, City of Edmond



# FINANCIAL ASSISTANCE PROGRAM UPDATE

Loans & Grants Approved as of December 31, 2017

#### FA Loans—383 totaling \$1,050,865,000

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.

#### CWSRF Loans—319 totaling \$1,550,590,377

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-192 totaling \$1,174,883,300

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-672 totaling \$59,561,641

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-575 totaling \$34,178,455

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—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.

#### 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—through the Emergency Drought Relief Commission—to address severe drought issues in specific Oklahoma counties.

# Total Loans/Grants Approved: 2,155 totaling \$3,873,122,620 Estimated Savings: \$1,307,112,702

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.



4th Quarter, 2017

Published online at www.owrb.ok.gov.

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The Oklahoma Water News is published quarterly by the Oklahoma Water Resources Board as authorized by Julie Cunningham, Executive Director.

For questions, comments, or article submissions, please contact Darla Whitley, Editor, at pubinfo@owrb.ok.gov or (405) 530-8800.

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