2nd Quarter 2013 Supreme Court Sides with Oklahoma in Tarrant Case

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Citizens Urged to Check and **Disinfect Wells in Tornado Stricken Areas**

Lugert-Altus Lake Suffers Impact of Golden Algae Blooms

Reasons to Test Your Well Water

Council to Develop Water Conservation Strategy

Drought Update

On June 13, in a unanimous and consequential decision, the U.S. Supreme Court ruled in favor of Oklahoma in a lengthy dispute with the Tarrant Regional Water District in north Texas over shared water rights in the Red River basin.

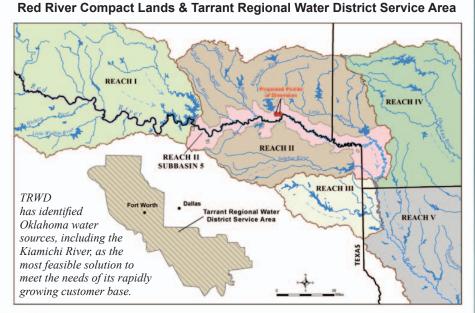
In their appeal to the Supreme Court, Tarrant had contended that the Compact provided implicit authority for them to take water from inside Oklahoma boundaries. But writing the majority opinion for Tarrant Regional Water District v. Herrmann, Justice Sonia Sotomayor clarified why the Red River Compact did not grant cross-border rights, citing "the well-established principle that States do not easily cede their sovereign powers; the fact that other interstate water compacts have treated crossborder rights explicitly; and the parties' course of dealing."

In responding to the decision, Gov. Mary Fallin stated "Today's ruling is great news for the state of Oklahoma and yet another victory in the effort to protect our state's water resources. We've maintained all along that Oklahoma must have the ability to set its own water policy and today's

unanimous Supreme Court decision solidifies that position. My congratulations go out to Attorney General Scott Pruitt and his office for their great work in this case on behalf of the state."

OWRB Executive Director J.D. Strong similarly praised the decision.

(continued on page 2)



From the Director

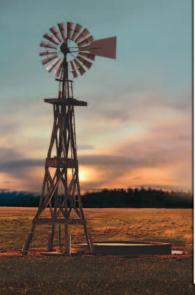
While the recently concluded legislative session was relatively quiet on the water front—especially compared to last year's flood of landmark water legislation—there were a few measures of note.

HB 2193 outlines procedures for the OWRB to properly administer the new Water Infrastructure Credit Enhancement Reserve Fund. The Fund, authorized through passage of State Question 764 last November, enables Oklahoma to meet its projected \$82 billion water and wastewater infrastructure needs through 2060, a priority initiative of the 2012 Update of the Oklahoma Comprehensive Water Plan.

(continued on page 2)



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



Tarrant Case (continued)

"Obviously, this is vindication for Oklahoma and the two neighboring Red River Compact states who joined with us to hold Texas accountable to the promises and provisions of our 33-year-old Compact agreement. It's also a victory for the seven mostly arid western states who sided with Oklahoma and stood to lose at least as much control over their limited surface water supplies.

"Most importantly, though, this decision is a resounding victory for the citizens of Oklahoma and our ability to manage their water for their benefit. While the elegant

defense of our position by Oklahoma's legal team spawned considerable optimism, it's a relief that the high court has reaffirmed our interpretation of long-settled agreements over the apportionment of interstate waters. After many years of legal maneuvering and saber-rattling, this should end, once and for all, Tarrant's attempts to circumvent Oklahoma's water management authority," he said.

Tarrant Regional Water District provides water to more than 1.7 million people in north Texas, including Fort Worth, and expects its customer base to more than double by 2060.

From the Director (continued)

SB 965, which transitions the nine-member OWRB Board from its long-standing Congressional District and at-large representation to a new regional scheme, passed by one vote just before the Legislature adjourned on May 24. This change loosely mirrors the eight 1995 OCWP planning regions plus a ninth in the Panhandle. The measure takes effect in 2014 and will be slowly phased in over the coming years.

A new Emergency Drought Relief Fund, enabled through HB 1923, includes \$3 million for future drought mitigation and projects. While details have yet to be resolved, in the event of a gubernatorial drought declaration, expenditures will be approved through an Emergency Drought Commission consisting of the Secretary of Agriculture and Executive Directors of the OWRB and Oklahoma Conservation Commission.

While no bills were passed to implement a true regional water planning program, the most popular recommendation

Future OWRB Membership and Representation



Currently, five OWRB
Board
members represent
each of Oklahoma's five
Congressional Districts (at
right) with four at-large
members. Senate Bill 965,
passed this legislative session,
reconfigures the boundaries for
those regions (above). Initial
transition will begin with
Region 4 on July 1, 2014.

Oklahoma's Congressional Districts

of the OCWP and the only priority initiative yet to be implemented, last year's increased appropriations to implement OCWP priorities were left intact. And not only were efforts to repeal the groundbreaking Water for 2060 Act soundly rejected, all appointments have now been made to the Advisory Council envisioned under that legislation, passed last year. Lastly, all of the OWRB's new rules, including those to implement the new mining pit water regulations in the Arbuckle-Simpson, were approved by the Governor and Legislature.

There have been several recent developments of note in lawsuits involving the OWRB. Of course, Oklahoma's resounding victory in Tarrant Regional Water District v. Herrmann is first and foremost.

Following presentation of oral arguments to the U.S. Supreme Court on April 23, the justices deliberated the complicated details of interstate water apportionment envisioned under the Red River Compact. Oklahoma's case was strong, as nine other states formally supported our position while Tarrant received such support from only one state: its home state of Texas. These states, including two other Red River Compact members, share our view that Tarrant is wrong in its interpretation of our long-settled

"Oklahoma's case was strong, as nine other states formally supported our position while Tarrant received such support from only one state: its home state of Texas."

agreement over the apportionment of shared waters. The court's favorable decision, announced June 13, will end, once and for all, the repeated attempts by North Texas entities to undermine Oklahoma's water management authority.

In late April, the Oklahoma Supreme Court issued a ruling in the lawsuit brought against the OWRB and its ongoing process for determining the maximum annual yield for the Arbuckle-Simpson aquifer. While the Court directed the OWRB's hearing examiner to provide the parties with additional notice and opportunity to respond to certain communications, we are encouraged that they generally upheld the integrity of our hearing process. We remain hopeful this important matter can be brought to the Board for final consideration very soon. •

Citizens Urged to Check and Disinfect Wells in Tornado Stricken Areas

The National Ground Water Association (NGWA) recommends that anyone with a household water well in an area affected by recent tornados should closely inspect their well casing and well cap for damage from falling trees or flying debris.

The well casing—the vertical pipe extending above the ground surface—provides access to the well through the well cap on top. If the casing or well cap are cracked, loose, or bent, surface contamination could enter the well.

Angie Taylor, coordinator of the OWRB's Well Driller and Pump Installer Program, recommends that all well owners in the affected areas take the extra precaution of disinfecting their wells.

"Even if your well and water appear to be unaffected, other wells in these areas have been compromised," adds Taylor. "Contaminants entering the groundwater at a location near

you may affect your water as well."

Taylor further noted that because water moves horizontally through aquifers, it is important to disinfect your well at least once each year. It is also important to disinfect if flooding has occurred around your well.

If the well casing or cap has been damaged, Taylor discourages well owners from making repairs themselves. A driller licensed by the OWRB should be contacted. A search form for finding licensed Oklahoma drillers is available on the OWRB website at www. owrb.ok.gov/wd/search/public search.php. •



This Cleveland County homeowner's well cap and casing were broken completely off at ground level by the May 19 tornado, leaving a direct conduit for contaminants to reach the groundwater. The damaged well was brought to the attention of OWRB staff by a licensed well drilling firm that is currently providing repairs to the well at no cost to the owner.

Disinfecting Your Well With Chlorine Bleach

STEP 1: If your water is muddy or cloudy, run the water from an outside spigot with a hose attached until the water becomes clear and free of sediments.

STEP 2: Determine what type of well you have and how to pour the bleach into the well. Some wells have a sanitary seal with either an air vent or plug that can be removed. If it is a bored or dug well, the entire cover can be lifted off to provide a space for pouring bleach into the well.

STEP 3: Pour a one-gallon bottle of unscented bleach down into the well casing.

STEP 4: After the bleach has been added, run water from an outside hose into the well casing until you smell chlorine coming from the hose. Then turn off the outside hose.

STEP 5: Turn on all cold water faucets both inside and outside the home until the chlorine odor is detected in each faucet, and then turn them all off. (If you have a water treatment system, switch it to bypass before turning on the indoor faucets.)

STEP 6: Wait 6 to 24 hours before turning the faucets back on. It is important not to drink, cook, bathe, or wash with this water during this time period because it contains high amounts of chlorine.

STEP 7: Once the waiting period is up, turn on an outside spigot with hose attached and run the water into a safe area where it will not disturb plants, lakes, streams, or septic tanks. Run the water until there is no longer a chlorine odor. Turn the water off.

STEP 8: The system should now be disinfected and you can use the water. Source: EPA

New OWRB Map Viewer Provides Quick Access to Water Level and Streamflow Information

Due in part to increased interest and concern in the continued decline in water levels across the state, the OWRB has developed a new online map viewer to simplify access to real-time surface water information. The "Lake Level and Streamflow Conditions for Oklahoma" map viewer contains clickable links on statewide stream gages and major lakes.

OWRB GIS personnel continue to develop additional online data and mapping tools that enhance public access to other water data as well as maximize agency transparency. For example, the Oklahoma Comprehensive Water Plan (OCWP) map viewer places all relevant state water information at the fingertips of citizens and water users. Oil and gas companies frequently utilize this convenient tool to locate potential sources of water as well as local water right holders from whom they might purchase rights.

Go to www.owrb.ok.gov and click on "Interactive Maps" to see the full suite of map viewers available to help users find the latest information about water resources in Oklahoma.

Lugert-Altus Lake Suffers Impact of Golden Algae Blooms

Lugert-Altus Lake in southwest Oklahoma experienced a significant fish kill in late winter (lasting from December 2012 through February 2013) caused by a golden algae bloom. Officials from the Oklahoma Department of Wildlife Conservation (ODWC) are currently discerning the severity of the kill.

ODWC completed a four-day survey at Lugert-Altus on April 25 with gill nets and by electrofishing. During this survey, no fish were caught. In ordinary surveys, ODWC would expect to capture about 1,000 fish in an effort of this magnitude. It would appear that the lake is no longer a viable fishery.

"While this is certainly disappointing, ODWC is going to do what we can to bring back the fishery. Right now we are evaluating our options, which include re-introducing forage fish such as shad and bluegill into the lake this spring and stocking sport fish to see if that is successful. It will be dependent on a decline in golden algae toxicity," says Larry Cofer, southwest region fisheries supervisor for ODWC.

It is also likely that fish will return to the lake from upstream ponds and the river as toxicity from golden algae declines. The ODWC will continue to sample the lake for golden algae and fish to confirm and report the possible return of fish to the lake.

While golden algae are naturally occurring, they have the potential to produce blooms that are toxic to gill-breathing organisms and turtles. Factors such as water quality, cooler water temperatures, nutrients in the water, salt concentrations, low rain levels, and low amounts of healthy green algae create favorable conditions for a golden algae bloom.

Drinking water is a concern in lakes when there is a fish kill and Lugert-Altus Lake is one source of drinking water for the City of Altus. The Oklahoma Department of Environmental Quality (ODEQ) has reviewed operation of the Altus public water supply and determined that the algae bloom should have no effect on drinking water. At the current time, Altus is not using its intake structure located in the lake. The ODEQ is working closely with the City of Altus to ensure the safety of drinking water supplied to its residents.

"The ODEQ encourages recreating on Oklahoma's many lakes, rivers and streams. We also want to remind people that to be safe in any body of water, people should never pick up dead or dying fish for consumption. It is also very important to be mindful of water conditions," says ODEQ Executive Director Steve Thompson.

The ODEQ reminds swimmers of precautions to reduce exposure to waterborne micro-organisms:

- Avoid swimming in polluted water. (Oil sheen, floating debris, and dead fish are visible signs of polluted water.)
- Avoid swimming in stagnant (unmoving) water.

- Avoid swimming in water with a temperature greater than 80 degrees. (If water does not feel cool when you first enter, it is likely to be warmer than that.)
- Avoid swimming in water with a green surface scum.
- Avoid swimming after a heavy rain.
- Avoid swimming near storm drains.
- Avoid swallowing water while swimming.
- Hold your nose or wear nose plugs when jumping into water.
- Wear ear plugs.
- Wear swim goggles.
- Wash cuts and scrapes with clean water and soap.
- Shower before and after swimming.
- Take children to the restroom frequently.
- Use swim diapers on infants.

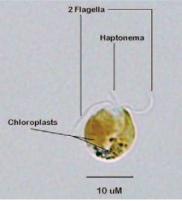
Additional information can be found at http://www.deq.state. ok.us/factsheets/water/swimming.pdf.

The ODWC urges boaters and anglers on Lugert-Altus and other lakes to clean boats, live wells, and fishing gear to help reduce the chance of golden algae spreading to other lakes.

The ODWC is working with the ODEQ and other state agencies, as well as fish biologists from other states, to develop methods to control golden algae blooms and better understand this species. •

A golden alga (Prymnesium parvum) is a planktonic or microscopic floating plant. Prymnesium parvum often exist as one specie in a mix of many species inhabiting a water body and cause no obvious problem. However, at times this algae bloom in large numbers and release toxins that cause fish kills. Dving fish typically show bleeding of the gills, fins, and scales and behave as if there is oxygen depletion. Golden alga blooms, however, seldom cause dissolved oxygen depletions. Sometimes, the water has a golden color when this happens and thus the common name. P. parvum is a very tiny (8 to 11 micrometers or about the size of a human red blood cell) oval or elliptical shaped, single-cell alga that has two hair-like flagella for swimming, a short tail or haptonema that it uses for attachment, and two saddle-





shaped chloroplasts. *P. parvum* has not been shown to be toxic to other animals (wildlife, livestock, or humans).

(Information courtesy the Texas Parks and Wildlife Department)

Reasons to Test Your Well Water

The taste, odor and appearance of your drinking water can give you an indication of its quality, but do you know if your water is really safe? A glass of water may contain dissolved minerals, organic compounds, or even live organisms. Some of these materials, if present in very small amounts, are no problem for drinking water. Other materials, however, may be serious health risks.

If you get your water from a private well, it is your responsibility to monitor its quality. Much of Oklahoma's groundwater meets Safe Drinking Water Act (SDWA) standards without any treatment. However, in some areas, there are health concerns, such as nitrate, fluoride, or arsenic concentrations above the drinking water standard. The more common problems, such as hardness or high concentrations of iron, are not health concerns.

In general, water analyses can be classified as bacteriological, inorganic, and organic tests. The bacteriological tests check for indicator species of bacteria (for example, coliforms or E. coli). Inorganic tests measure the concentration of dissolved minerals and the pH, or acidity. If other contaminants are suspected, the water may be tested for organic chemicals (including volatile organic compounds, pesticides, and petroleum products), radiological contaminants (such as uranium, radium, and radon) or heavy metals (such as arsenic, mercury, lead, or cadmium).

The only way to be certain that your water supply is safe is to test it regularly for common contaminants and conduct additional tests if

CONCERN	WHAT TO TEST

Water supply for infant less than 6 months	Nitrate
Lead pipe or lead solder in plumbing (older home)	Lead, copper, zinc, pH, alkalinity
Close to old fuel storage tanks	Hydrocarbons, volatile organic compounds
Close to gas and oil drilling	Chloride, total dissolved solids, sodium, barium, lead, pH, electrical conductivity, volatile organic compounds
Close to confined livestock area	Nitrate, total coliform bacteria
Close to a chemical/ pesticide spill or sprayer loading/ rinsing area	Specific chemical or pesticide
Close to a landfill or dump site	Volatile organic compounds, heavy metals, synthetic organic compounds

you suspect a particular contaminant. Testing for all possible contaminants can be very costly, so it can be very helpful to narrow down the most likely suspects.

The Oklahoma Department of Environmental Quality (ODEQ) conducts routine bacteriological and inorganic chemical tests. Contact DEQ at 405-702-1000 for information on taking the water sample, how to get it to the laboratory, and the cost. •

Information Courtesy Oklahoma Cooperative Extension Service

PROBLEM	IF YOU EXPERIENCE	WHAT TO TEST
Appearance of Water	Brown or yellow	Iron, tannin
	Frothy or foamy	Detergents
	Cloudy	Turbidity
	Organism brown precipitate	Iron, pH
	Black flakes	Manganese, pH
Staining of fixtures or	Red or brown	Iron, pH
clothing	Yellow	Iron, hydrogen sulfide, hardness, pH
	Black	Manganese, hydrogen sulfide, pH
	Green or blue	Copper, pH
Odor or taste of water	Bitter	Nitrate, sulfate
	Rotten egg	Hydrogen sulfide
	Soapy	Detergents, surfactants
	Metallic	pH, iron, zinc, copper, lead
	Salty	Total dissolved solids, chloride, sodium, electrical conductivity
	Septic, musty, earthy	Total coliform bacteria, iron, pH
	Gasoline, oil, kerosene	Hydrocarbons, organic compounds
Other	Tarnished silverware	Hydrogen sulfide, pH
	Stomach ache, diarrhea	Total coliform bacteria, nitrate, sulfate, manganese
	Discoloration or mottling of children's teeth	Fluoride
	White deposits on pots and fixtures or soap scum dissolved solids	Hardness, alkalinity, sulfate, total
	Corrosion of plumbing	Electrical conductivity, pH, lead, iron, manganese, copper, sulfate, chloride

If you get your drinking water from a private well, it is your responsibility to monitor its quality.

Council to Develop Water Conservation Strategy

Fifteen Oklahomans with unique and divergent perspectives on Oklahoma's water resources have been selected to develop a blueprint for stabilizing—and possibly even reducing—rising demands for Oklahoma's finite freshwater resources, while at the same time protecting important growth and economic development goals.

Passed overwhelmingly by the 2012 State Legislature, the Water for 2060 Act made Oklahoma the first state in the nation to establish an ambitious

goal of consuming no more freshwater in 2060 than is utilized today. The Act charges the Water for 2060 Advisory Council with studying and recommending appropriate water conservation and reuse practices, incentives, and educational programs to achieve this ambitious goal. Members are well versed in various water interests and were appointed by the Governor, Speaker of the House and President Pro Tempore of the State. The final appointment was made on May 22.

Both the goal and the Council were a direct result of a priority recommendation of last year's update of the Oklahoma Comprehensive Water Plan (OCWP) calling for moderation of water use patterns to avoid impending deficits projected by the plan.

"The Council's charge mirrors one of the Water Plan's most fundamental grassroots recommendations to identify truly effective, vetted and feasible measures through which we can reduce Oklahoma's water footprint. The Water Plan provided the data, but the Council members will provide the real world experience in identifying those conservation incentives and measures that have the greatest likelihood of success," says J.D. Strong, OWRB Executive Director, who will chair the Council.

Fourteen other members join Strong on the Council:

Jim Bachmann (Tulsa)
Lauren Brookey (Tulsa)
Tom Buchanan (Altus)
Bob Drake (Davis)
Danny Galloway (Stillwater)
Charlette Hearne (Broken Bow)
Roger Griffin (Broken Bow)
Mark Helm (Oklahoma City),
Nathan Kuhnert (Oklahoma City)
Phil Richardson (Minco)
Kevin Smith (Enid)
Trent Smith (Choctaw)
Joe Taron (Shawnee)
Jerry Wiebe (Hooker)

"I am tremendously excited to work with this impressive group. Each and every Council member shares my commitment to preserving our increasingly limited water supplies. We all recognize that conservation and reuse represent Oklahoma's most viable strategy to reduce or eliminate future water deficits and the resulting devastation to our economy," Strong adds. •

Simple Tips for Sprucing Up Your Sprinkler

Before you ramp up your watering this spring and summer, spruce up your irrigation system by remembering four simple steps: inspect, connect, direct, and select:

- Inspect. Check your system for clogged, broken or missing sprinkler heads. If you're not the do-it-yourself type, go with a professional—look for an irrigation professional certified through a WaterSense labeled program.
- Connect. Examine points where the sprinkler heads connect to pipes/hoses. If water pools in your landscape or you have large wet areas, you could have a leak in your system. A leak about as small as the tip of a ballpoint pen (or 1/32nd of an inch) can waste about 6,300 gallons of water per month.
- Direct. Are you watering the driveway, house, or sidewalk instead of your yard? Redirect sprinklers to apply water only to the landscape.
- Select. An improperly scheduled irrigation controller can waste a lot of water and money.
 Update your system's schedule with the seasons, or select a WaterSense labeled controller to take the guesswork out of scheduling.



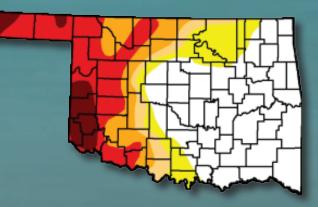
Planting a beautiful yard this spring?

Spruce up your sprinkler before you ramp up your water use.



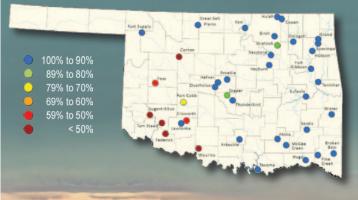
Drought Update

U.S. Drought Monitor June 25, 2013

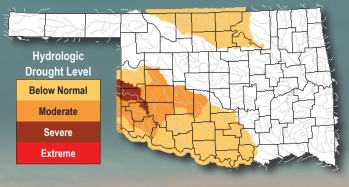


Drought Intensity & P of State in Drought Ca	
Abnormally Dry	53.14
Moderate Drought	42.09
Severe Drought	36.76
Extreme Drought	26.35
Exceptional Drought	8.69

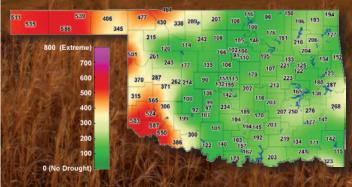
Reservoir Storage June 25, 2013



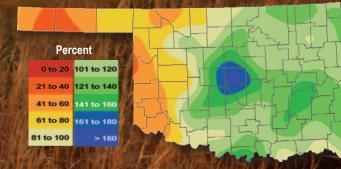
Streamflow (7-Day Average) June 24, 2013



Keetch-Byram Drought Index June 25, 2013



Percent of Normal Precipitation Last 90 Days (March 27 through June 24)



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.

Oblahoma Water News

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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.



2nd Quarter 2013

Darla Whitley, Editor

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Photography: Barry Fogerty

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

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FINANCIAL ASSISTANCE PROGRAM UPDATE

Loans & Grants Approved as of July 1, 2013

FAP Loans—359 for \$886,515,000

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

CWSRF Loans-270 for \$1,186,245,974

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—159 for \$848,623,300

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-591 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: 1,952 for \$3,007,620,432 Estimated Savings: \$1,031,640,366

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.