



Water Quality Division

**Our Environment.
Our Future.**

Turning on the **Water Works**

The Water Quality Division (WQD) strives to ensure Oklahomans have a safe source of drinking water, adequate treatment of discharged wastewater, financial resources for improving community water and sewer infrastructure, and properly trained water management professionals. In addition, the division

works to provide science-based watershed protection, effective stormwater management controls and high-quality data to develop protective water quality standards for the state. WQD's efforts in licensing, permitting, enforcement and technical assistance help protect the state's waters and support its beneficial uses.

WQD is divided into five broad groups:

Administration

- Provides executive oversight of division responsibilities.

Compliance Tracking

- Manages the collection and evaluation of sampling data required from drinking water and wastewater treatment facilities.

Permitting

- Issues permits limiting the amount of pollution that can legally enter the state's waterways from municipal and industrial wastewater facilities, watersheds and certain construction sites.

Enforcement

- Conducts compliance assistance visits and inspections at public drinking water and wastewater systems and issues written enforcement actions for facility violations.

Construction and Operation

- Reviews construction plans for proposed public water and wastewater projects.
- Manages a loan and grant program to help fund public waterworks projects.
- Provides training sessions and examinations of water, wastewater and laboratory operators for state certification.

The following pages illustrate how the work of WQD staff safeguards one of the state's most precious natural resources for this generation and the next.

WQD specialists perform health assessments of rivers, lakes and streams across the state and recommend water quality standards.

Agency Garners **State Regents Award**

DEQ was presented the Economic Development Grant Award for its Partnership Development Program with Rose State College. The award was presented by the Oklahoma State Regents for Higher Education and is sponsored by the Regents Economic Development Council. DEQ was nominated for the recognition by Rose State College Vice President Stan Greil.

The Regents program is designed to recognize outstanding partnerships that lead to significant contributions in furthering the education of Oklahoma's workforce. The WQD Operator Certification Program partnered with Rose State College Professional Training

and Education Center to meet public drinking water and wastewater facility operator educational needs by combining resources to offer professional training.

Regents Chancellor Glen Johnson hosted the event attended by state university and college presidents, community business leaders and award recipients. Rose State College President Terry Britton hosted the Rose State College delegation from Midwest City. DEQ joins a stellar list of past Rose State partners, including Tinker Air Force Base-Force Development Unit, Boeing Company and Midwest Regional Medical Center. ■

WQD representatives accepting the Regents Economic Development Grant award. From left to right: Dr. Glen D. Johnson, Chancellor, Oklahoma State Regents for Higher Education; Stan Greil, Rose State College; Shellie Chard-McClary, Oklahoma Department of Environmental Quality; Chris Wisniewski, Oklahoma Department of Environmental Quality; Bill Clark, Rose State College and the Honorable Dave Lopez, Secretary of Commerce and Tourism.



Water Quality Staff **Reaches Out to Customers**

WQD staff proactively educate Oklahoma communities on the proper operations of their waterworks systems. During the current fiscal year, the Public Water Supply Compliance Tracking Section presented external and internal customer workshops about the EPA drinking water Total Coliform Rule (TCR) and Lead and Copper Rule (LCR). This training was provided to public water systems that were facing first-time sampling requirements or facility compliance issues and those located near the workshop site. The workshops were also open to DEQ and Oklahoma Rural Water Association (ORWA) representatives. In total, one LCR and five TCR workshops were presented across the state. These seminars also provided credit for operator certification continuing education hours. The goal was to provide information in a group setting so questions could be asked that might apply to many in attendance.

In October 2010, WQD staff from the Wastewater Compliance Tracking Section (WWCT) gave training presentations for system operators at the Oklahoma Water Pollution Control Association (OWPCA) annual 'short school' at Rose State College in Midwest City. The sessions covered common issues and errors in completing Discharge Monitoring Reports (DMR) and an update on the division's progress toward accepting electronic DMR forms via the Internet. In addition, WWCT staff recently updated the DMR handbook, and copies of this manual were in high

demand by operators at the conference.

The Public Water Supply (PWS) Enforcement Section works with approximately 1600 local drinking water systems to assist them in providing safe water to more than 3.5 million Oklahomans. Public water supplies are continuously monitored for water quality. The federal and state rules that apply to them are many and complex in nature. There are no simple answers, and continuing education with technical assistance is crucial. The outreach and training activities of the PWS Enforcement Section are a notably effective means of achieving compliance with the many regulations that apply to these systems. The section has assisted communities in facility construction and operation and in meeting drinking water standards for nitrates, disinfection byproducts, bacteria and other contaminants. The section's outreach and training activities have reached a wide audience including civic administrators, system operators, consultants, and others in the drinking water industry. This effort has involved both on-site training and classroom presentations provided at conferences held by organizations such as ORWA and OWPCA.

WQD staff from the Industrial Enforcement Section made several presentations to customer groups this fiscal year including a stormwater management workshop for Tulsa-area homebuilders, the Central Oklahoma Storm Water Alliance conference on municipal stormwater management

in Oklahoma City, and the EPA Region 6 Municipal Separate Stormwater Sewer System (MS4) operators' conference last summer in Santa Fe, New Mexico. These agency outreach efforts establish solid

customer rapport and save DEQ time and expense by increasing compliance rates, reducing monitoring mistakes and decreasing reporting errors. ■



WQD Public Water Supply Enforcement staff perform a sand-filter study as part of a Comprehensive Performance Evaluation at the Talihina water plant.

Putting Wastewater to Work

WQD is anticipating a future expansion of municipal wastewater reuse options offered to municipal wastewater facilities. In the past, wastewater reuse in Oklahoma has been geared primarily toward municipal total-retention lagoon systems designed for irrigation of crops. Some golf course irrigation has also been allowed for wastewater discharge, known as effluent, which has been disinfected. Irrigation has only been permitted when the golf course was not in use by the public. It has been determined that these uses should be expanded considering the quality of effluent produced by many municipal utilities today. Also, drought conditions have become more persistent in recent years, and alternatives to expanding public water supplies to meet increasing demand will become necessary in the future.

Expanding water reuse will require a substantial change to the agency's existing regulations. To assist DEQ in that effort, the Oklahoma Municipal League (OML) formed a Water Reuse Committee to review what other states have done in this area. The committee included representatives of OML, DEQ, Rose State College and the Oklahoma Water Resources Board (OWRB). The committee met several times in summer 2010 and put together a chart that includes four classes of reuse facilities based on the anticipated uses.

Minimum treatment requirements and effluent quality recommendations were presented to

DEQ in autumn 2010 for each reuse class. In the next 12 months, DEQ will prepare draft rules and host stakeholder meetings to receive comments on the proposed regulations. Once these comments are addressed, the rule change proposal will be submitted first to the Water Quality Management Advisory Council for review, then Environment Quality Board and, finally, to the state Legislature and Governor for consideration.

It is anticipated that these rule changes will be completed by the end of the 2012 legislative session. ■

The four classes of water reuse activities determined by the OML Water Reuse Committee.

Preliminary Reuse Activities	
Restriction No. 1	Indirect Potable Reuse/ Aquifer Recharge.
Restriction No. 2	Application where there is a relatively high risk to human exposure such as residential irrigation.
Restriction No. 3	Application where there is lesser risk to human exposure such as irrigation of vineyards, restricted golf course irrigation
Restriction No. 4	Low risk application such as pasture for non-dairy animals or sod farms.

Banner Year for **DWSRF**

As the Oklahoma Drinking Water State Revolving Fund (DWSRF) celebrates its 14th anniversary, it is acknowledged yet again by EPA as an outstanding and exceptional program. Oklahoma was the first state in EPA Region 6 to have construction contracts finalized before the February 17, 2010, deadline for the American Recovery and Reinvestment Act (ARRA) of 2009. Oklahoma was also one of the first two states to expend 100 percent of its allotted \$30.2 million for construction of ARRA projects. This ensured that ARRA funds were quickly released into the economy, thereby saving and creating jobs for Oklahomans.

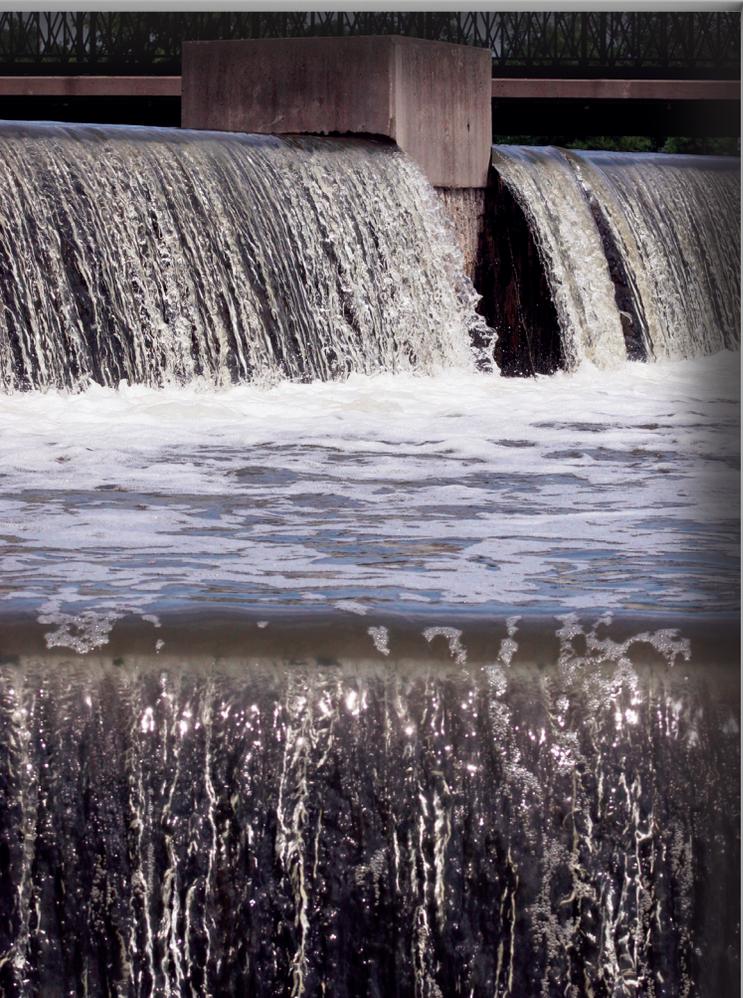
The DWSRF program is authorized through the Safe Drinking Water Act and is co-managed by DEQ and OWRB. To date, more than 114 water system improvement projects totaling more than \$635 million have benefited from this low-interest loan program. DWSRF provides funding to any size public water system

for various projects, including those involving the source of water, treatment, transmission, distribution, pumping and storage. Currently, 36 water systems are on the Project Priority List for \$300 million for projects to be funded within the next few years. DWSRF applicants are assisted throughout the planning, design, bidding, contracting and construction phases of their project by DEQ engineers and environmental specialists. Applications for the DWSRF program are accepted at any time throughout the year.

One ARRA recipient was recently recognized for its excellent water infrastructure project. The Wagoner Public Works Authority (PWA) received the 2010 DWSRF Award for Sustainable Health Protection from EPA. The Wagoner PWA met very specific guidelines for this award, including financial integrity, public health benefits, affordability, and innovative financing. Instead of contracting the work, the authority saved money by utilizing its own staff to perform the upgrades to their system. ■

Construction of a new water intake structure for Henryetta utilizing ARRA loan funds through the DWSRF program.





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