Coordinating Success

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ARRA funds provided a new clarifier unit currently under construction at the Norman drinking water treatment plant.

The American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act (ARRA), commonly known as the "stimulus bill", became law February 17, 2009. ARRA made more than $500 billion in funds available to state and local governments. Some of the funding was for environmental projects. Most of the state - allocated ARRA money for environmental projects in Oklahoma was channeled through DEQ.

Public Water Supply Infrastructure

ARRA funds for public water supply infrastructure and improvements were awarded to states through Drinking Water State Revolving Fund (DWSRF) programs. DEQ received a $31.4 million ARRA grant, of which $1.2 million was set-aside for administrative costs. This left $30.2 million for project funding.

ARRA mandated that projects be under construction or under contract by February 17, 2010, or funding would be reallocated to other states. DEQ established a "shovel-ready" target date for each project of June 16, 2009, to ensure the deadline was met. ARRA also required that 20 percent of the grant fund "green" (innovative and energy-efficient) projects, and that at least 50 percent of the funds be awarded in the form of grants or "principal forgiveness" or other forms of subsidized loans. In addition, projects must meet "Buy American" legislative mandates and comply with the Davis-Bacon Act for federal prevailing wage rates on all project contractors.

DWSRF funded 24 ARRA-related drinking water projects statewide for a total of $137 million. For each project, 30 percent of the funding (up to a maximum of $2 million) came in the form of principal forgiveness and 70 percent in the form of a DWSRF low-interest loan. ARRA funds accounted for $30.2 million and the DWSRF loan amount was $107 million. A total of 63 contracts are being utilized to build the projects. All projects were under contract by January 7, 2010, and all were under construction by February 5, 2010. All 24 projects should be completed by 2013, with some finishing as early as September 2010. These projects provide an investment in Oklahoma's drinking water infrastructure while providing jobs and contributing to economic growth.

Putting cleaner school buses on the road.

Tar Creek Relocation

ARRA also provided the state with $15.7 million for the voluntary relocation of citizens from the towns of Picher, Cardin, Hockerville, and the surrounding area due to increased mining subsidence risk. These relocation funds will have been spent by the end of 2010.

Brownfields

Another $1.9 million of ARRA funding will finance shovel-ready Brownfields cleanup projects, encouraging redevelopment and creating local jobs in communities across the state. The funds are available to eligible entities through DEQ's existing Brownfields Revolving Loan Fund Program. Local governments, tribes and non-profit organizations are eligible for subgrants and loans; "for-profit" companies may obtain low-interest loans.

Cleaner Diesel School Buses

Other ARRA money goes to projects to help clean the air by reducing diesel emissions. The Oklahoma Clean Diesel School Bus Program was designed to reduce toxic diesel emissions in and around schools by retrofitting older diesel school buses with emission control technologies and by supplying partial funding to replace old buses with new ones. More than $3.5 million in ARRA money supported this existing program by providing additional grant opportunities for school districts in the Oklahoma City and Tulsa areas. To date, ARRA has authorized projects in 26 Oklahoma school districts, which will result in the replacement of 75 older school buses with new buses equipped with state-of-the-art emissions control systems – systems expected to reduce pollutant emissions by 90 percent or more compared to those of the buses replaced. The ARRA funds match up to 50 percent of the cost for school bus replacements. In addition, these projects will result in the retrofitting of 110 buses with emissions reduction technologies, which will substantially reduce pollution emitted by those buses. This is an ongoing program, and additional projects are anticipated.

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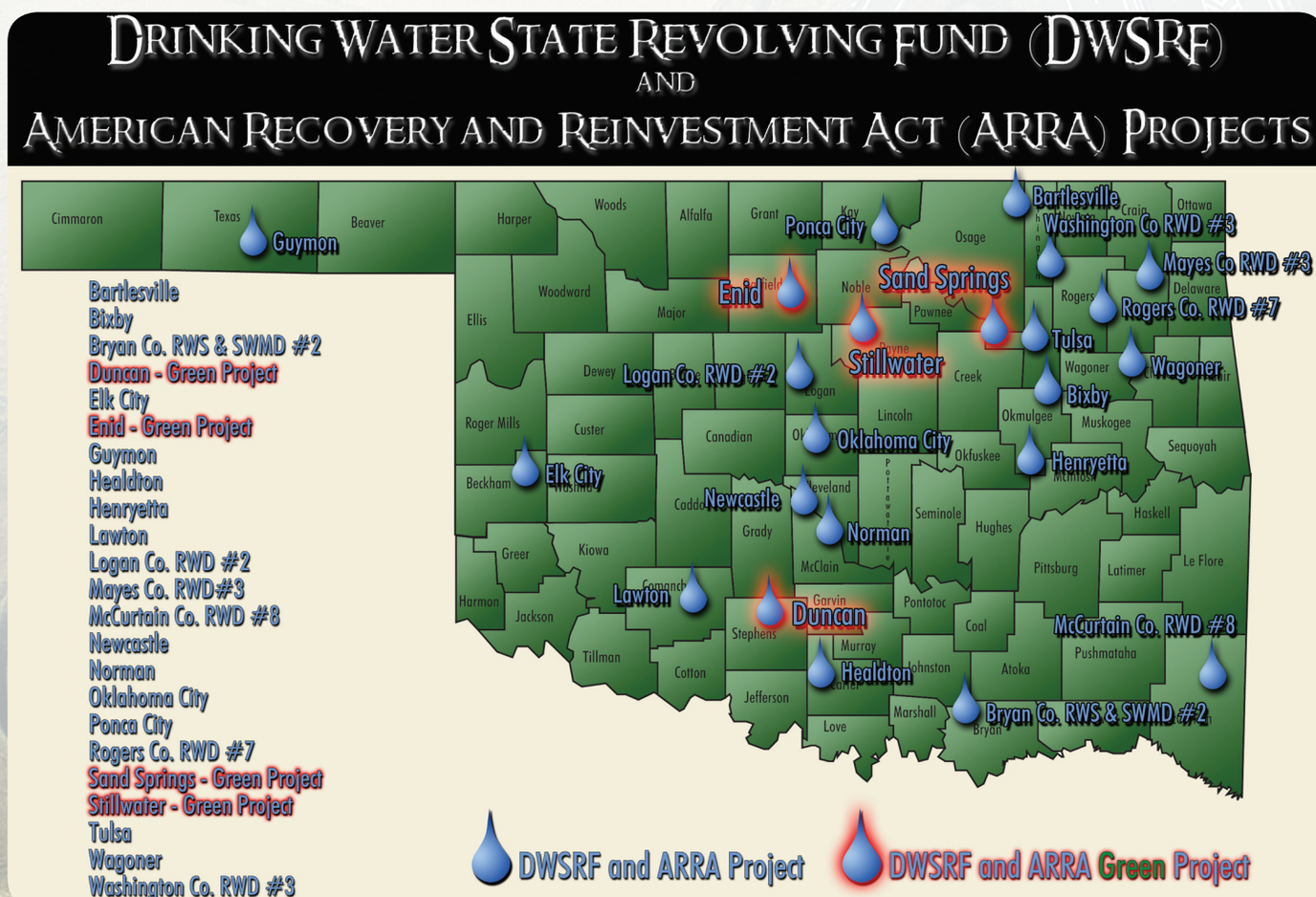
Implementation of ARRA

ARRA requires increased accountability and transparency. The act requires recipients to develop and use expanded reporting processes so the federal government may gauge the impact of ARRA funds on the economy. The act also requires performance data such as the number of jobs a particular funding stream creates or maintains. As part of the stringent accountability provisions, the act establishes a Recovery Transparency and Accountability Board charged with oversight of recovery dollars. This responsibility includes ensuring funds are awarded and distributed in a prompt, fair, and reasonable manner; uses of the funds are transparent and are reported clearly, accurately and timely; fraud, waste and abuse of funds are minimized; funds are managed to avoid delays and cost overruns; and program goals are achieved and measured.

The State of Oklahoma chose to use a centralized reporting process to gather all required data to assure consistent and transparent reporting not only to federal agencies but to the citizens of Oklahoma as well. The level of documentation to meet these assurances is unprecedented. Documenting expenditures using ARRA-specific account codes assigned by federal agencies will continue through the next two years as monthly, quarterly, and annual reports are generated by state agencies for the different programs.

Finance

The finance section of DEQ has been greatly affected by the ARRA funds. The daily work has increased almost two-fold. One of the largest obstacles has been in reporting of the grants. The finance section works closely with Environmenta Protection Agency (EPA) to ensure that the reporting of these grants is correct and timely. It takes one employee at least one week in preparation time to complete and submit one report. This employee prepares the grant reporting for the entire agency.



Map showing the distribution of 24 "shovel ready" water supply projects across Oklahoma awarded ARRA funding in 2009.

DEQ Tests Private Wells in Locust Grove

It is DEQ's goal to help ensure the health of Oklahomans. As such, DEQ employees are, at times, called on to respond to emergency situations. One such instance occurred in Locust Grove.

During FY 2010, DEQ officials analyzed well water within a five-mile radius of an *E. coli* illness outbreak in Locust Grove and discovered that 76 percent of the wells showed bacteriological contamination. The illness outbreak was not linked to the water supply. However, the contamination rate was substantially higher than the rate that would be expected for routine sampling in rural areas. Based on these findings, DEQ recommended that residents whose wells indicated bacteriological contamination immediately connect to an available municipal water supply or a rural water district, use bottled water or boil water before drinking it. Another option was for residents to equip the well system with full-time filtration and disinfection.

In addition, DEQ also recommended that the state seek funding for an in-depth study of the aquifer. This would enable the state to make informed decisions regarding the aquifer's management, which may mean various state agencies adopting regulations related to use and protection of it.

The well water-survey was undertaken after an outbreak of *E. coli* that originated at the Country Cottage Restaurant in Locust Grove. Hundreds of people got sick and one died as a result of this outbreak.

Governor Brad Henry requested that several state agencies take action to prevent further disease outbreaks of this type. DEQ had already begun an effort to look into the drinking water quality of nearby water wells, both public and private.

The agency offered to provide, at no cost, the collection of samples, bacteriological analysis and well evaluations. Three-member teams, comprised of an environmental specialist, an engineer and a representative of the State Environmental Laboratory, went to each participating home. In all, DEQ sampled 113 wells.

Samples were analyzed for total coliform bacteria and *E. coli* to determine if the well water was safe for human consumption. A database was created containing information about all of the wells tested. The database contains information about locations, well construction and maintenance, land use, pollution sources and sample results. Additionally, DEQ created maps showing sample sites and sample results.

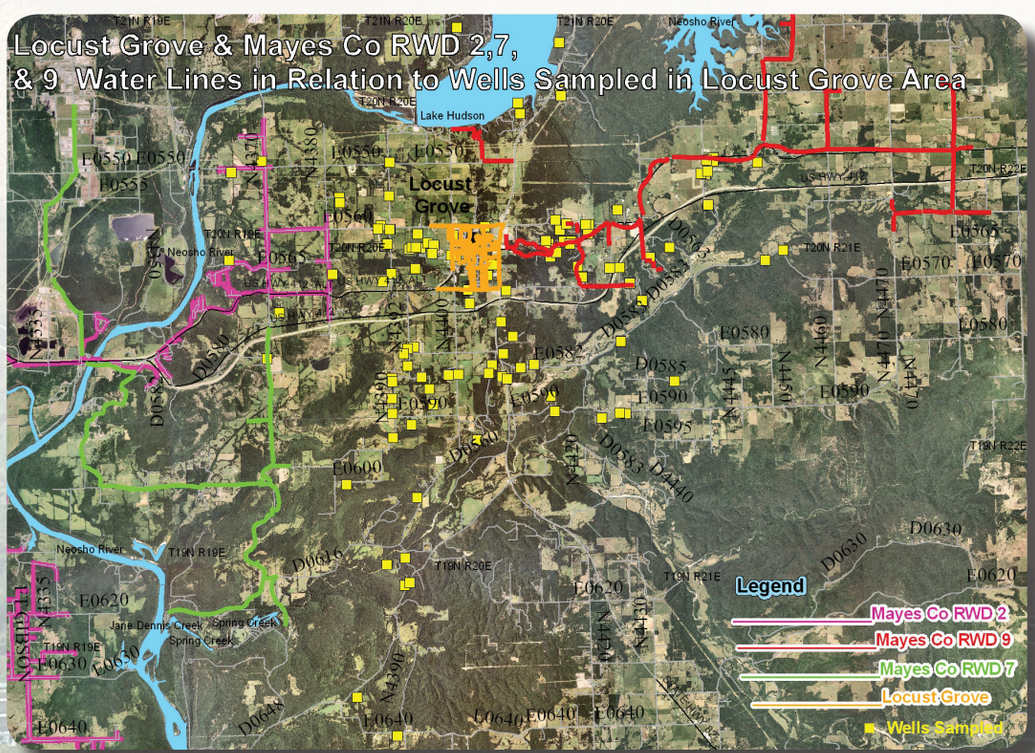


Illustration of location of Locust Grove area public water supply distribution lines in relation to private water wells sampled for bacterial contamination (Source: DEQ-WQD).

DEQ Samples Oklahoma River

Following an illness outbreak connected to the Oklahoma City Boathouse International Triathlon held at the Oklahoma River in May 2009, DEQ formed a work group with other agencies to look at pollutants in the watershed. The agency's involvement began after the Oklahoma State Department of Health (OSDH) investigated reports that some athletes had fallen ill. OSDH was able to determine that swimming in the Oklahoma River during practice sessions and at the event was the only significant exposure associated with the development of illness among participants. While all illnesses were compatible with a gastrointestinal outbreak that could be caused by water contaminated with human or animal waste, a single cause was not found.

The work group consisted of staff from DEQ, OSDH, the City of Oklahoma City, Oklahoma City-County Health Department, Oklahoma Water Resources Board (OWRB), and Oklahoma Department of Agriculture Food and Forestry (ODAFF). The work group met monthly to coordinate efforts to minimize runoff of pollutants into the river. In September 2009, DEQ and staff sampled approximately 40 sites along the river in an attempt to determine bacterial contributions from "sub-watersheds" within the Oklahoma City metropolitan area. This information, along with additional data from agencies within the workgroup, will be used to focus efforts on minimizing sources and amounts of bacteria along the waterway.

Response to this incident involved a number of actions taken by DEQ and other state agencies in order to work together toward a common goal – to develop a system that would allow use of the Oklahoma River as a venue for limited primary body contact activities while minimizing risk to participants. As part of this effort, several DEQ staff members from the Environmental Complaints and Local Services Division, Water Quality Division, and Customer Services Division along with city officials walked the river's shoreline. Staff identified pollution from human sources, including stormwater and bypasses of untreated sewage.

A plan to address these issues was already in the works and, through the implementation of the drafted plan, DEQ and multiple stakeholders are making improvements in the watershed. Cities are under order to develop controls for sanitary sewer overflows. In addition, two small wastewater treatment systems in the Oklahoma City area were identified as potential sources of high levels of bacteria. DEQ enforcement actions addressed these problems.

Officials with ODAFF addressed an unpermitted composting facility that may have been a source of bacteria through an enforcement action. All agencies continue to work to identify and correct sources of bacterial pollution.

The work group reviewed recommendations from national triathlon and wakeboarding sports organizations and found that local requirements were generally relied upon to address safety of water use. OWRB and the City of Oklahoma City reviewed other city requirements and determined that most rely upon the state's water quality standards for primary body contact in urban watersheds. In addition, the work group reviewed the voluntary advisory system that the Oklahoma Scenic Rivers Commission developed in cooperation with DEQ.

The work group's final recommendation was that the Oklahoma Water Quality Standards should be used to develop a three-tiered advisory system. No primary body contact activities will be allowed if the single sample bacteria limits in the standards are exceeded. Athletes will decide whether to participate when the mean sample bacteria limits are exceeded. Athletes will not face any restrictions on activities when bacteria levels are below the mean bacteria standards.

New sludge drying beds were constructed at the Maud sewer plant as part of the improvements.

Going Beyond the Routine

Recognizing that there are situations, especially with small communities, where routine processes to bring about compliance with sometimes costly and complicated water and wastewater regulations do not work as quickly or efficiently as the agency would prefer, DEQ sought a new way to address this burgeoning issue. The agency developed an effort known as Our Facility.

During FY 2010, more than 13 facilities reached compliance goals as part of the Our Facility initiative. To provide individualized technical assistance, DEQ employees sat down with city officials and operators to determine what they really needed to come into compliance. Additionally, 20 projects are in progress and 9 others are next on the list.

To understand the effectiveness of this effort, some background is necessary. As DEQ has worked over the years to bring communities into compliance with water and wastewater regulations, agency staff has noticed that small systems may have the will to comply but are often unable to get organized to do so. Small community councils serve part time, and staff for a typical town has widely varying levels of organizational proficiency. In the past, DEQ has been liberal in extending time periods for compliance, but the agency has made limited efforts to coordinate the various resources that are available to help small communities address compliance problems. With the Our Facility approach, staff members from the Administrative Services Division, Customer Services Division, Environmental Complaints and Local Services Division, Water Quality Division and Office of the General Counsel work as a unit to help the struggling facilities.

DEQ staff is assigned to districts in the state to provide technical assistance, help communities locate funding opportunities, provide assistance in decision-making, and use Supplemental Environmental Projects to fund small community assistance. The Our Facility approach emphasizes opening the lines of communication, so the agency's technical assistance is offered where it is most needed.

Our Facility goals include development of new approaches for doing business, targeting resources and tools to achieve compliance for small communities, and pooling agency resources to help small towns through coordinated technical assistance from multiple divisions.

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Quinton was able to build two additional wastewater lagoons and increase treatment capacity through Our Facility program assistance.

Focused attention from DEQ and partners resulted in a positive solution for the town of Pensacola when an agreement was reached allowing Mayes County RWD #6 to assume operations of the wastewater system.

Charting Progress

Towns that have made substantial progress in their struggles toward compliance as a direct result of Our Facility include Cherokee, Covington, Fairland, Hitchcock, Maud, Pensacola, Quapaw and Quinton.

In Pensacola, there were many ongoing compliance issues. The Pensacola Public Works Authority (PPWA) and DEQ agreed to a Consent Order in 2001. This enforcement action contained a schedule of tasks designed to eliminate permit violations regarding the wastewater treatment plant. A second Consent Order was signed in 2004 to revise the task schedule. The town had been unable to collect monthly sewer service bills and lacked funds to operate and maintain the wastewater system. The community had also been unable to obtain funding to complete the enforcement order tasks to upgrade the wastewater treatment plant.

In 2009, DEQ staff worked with PPWA to find a solution. An agreement was reached for Mayes County Rural Water District (RWD) No. 6 to assume operation of the PPWA's sewer collection system and wastewater treatment plant. The public drinking water supply in the town of Pensacola was already operated by the rural water district, so it was an easy transition and a process the two entities had been through before. Pensacola and RWD 6 also agreed that RWD 6 would operate the Pensacola sewer system and collect the monthly sewer service bills from users. PPWA agreed to raise the monthly sewer service fee to provide adequate funding for the routine operation and maintenance of the system. Additionally, DEQ and RWD 6 have signed a financial assistance agreement whereby DEQ will provide funds to RWD 6 for rehabilitation of the Pensacola sewer system. This project is now underway and is managed by the new operator of the Pensacola wastewater system.

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Appendices

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