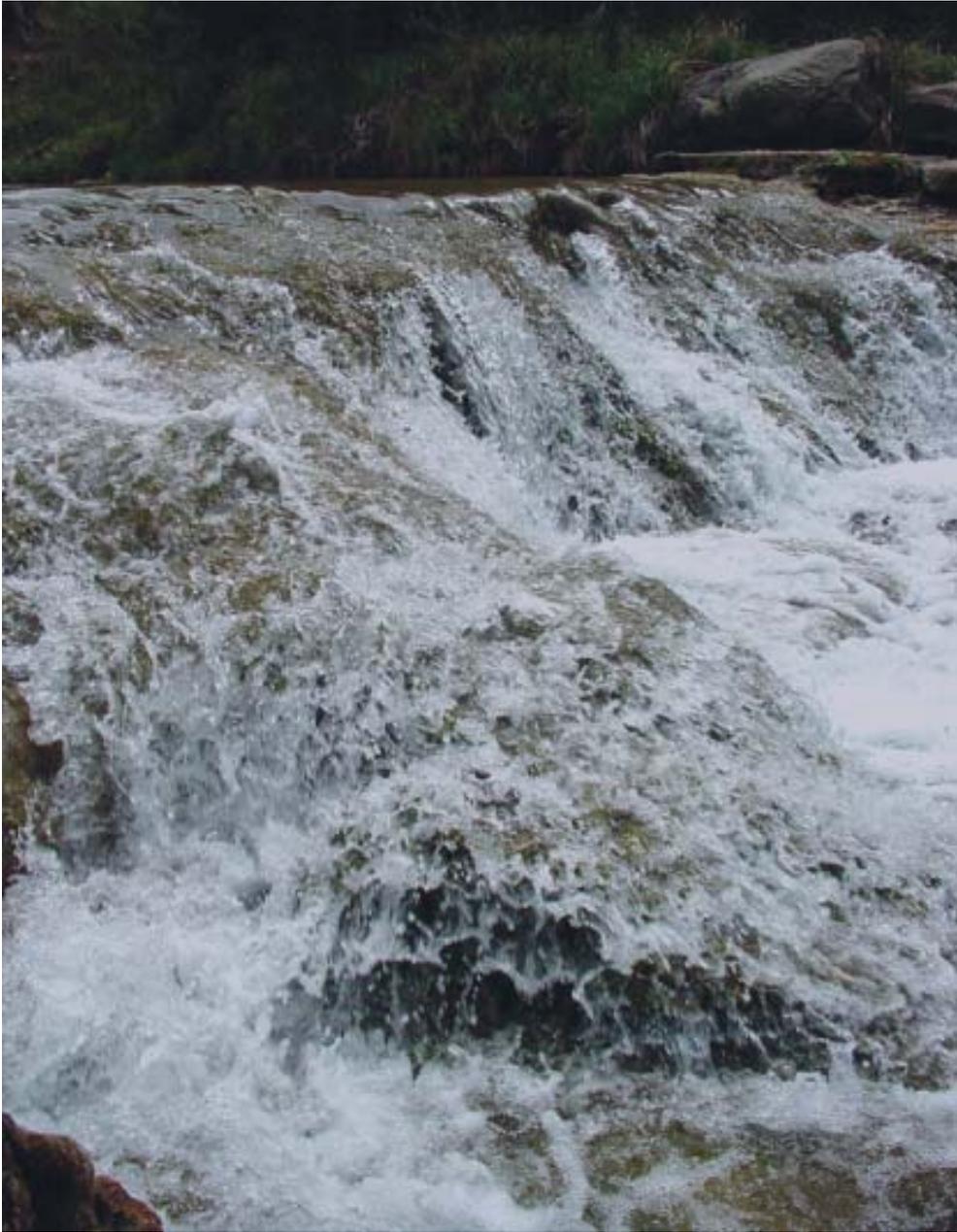


Water Quality



DEQ Water Quality Activities



The DEQ is involved in many Water Quality activities. Both the Water Quality (WQD) and Environmental Complaints and Local Services (ECLS) Divisions play large roles in protecting Oklahoma's ground and surface waters. These roles, which consist of licensing, permitting, enforcement, and technical assistance, ensure the designated beneficial uses as established in Water Quality Standards and safeguard the public by assuring safe drinking water. In addition, the State Environmental Laboratory assists the other DEQ divisions, other state agencies, and the general public by analyzing the quality of drinking water and treated wastewater in Oklahoma.

The Operator Certification Section conducts training sessions and administers examinations for water, wastewater, and laboratory operators. These sessions allow for the continuing education and advancement of operator personnel. The education and licensing program also helps to ensure that only qualified people are making decisions about the treatment of wastewater and drinking water. Once certified, these properly

trained individuals contribute to the protection of the environment and the health of Oklahoma residents.

Permitting and enforcement activities are constantly evolving to become more effective. Permitting has been simplified in recent years by the use of general permits, permits by rule and of state-of-the-art technology to reduce the need for variances. Enforcement activities have been prioritized to ensure that the most serious violations are addressed in a timely manner to protect the environment and the ultimate end user. Increased attention to violations includes enforcement through Orders, with penalties, that are issued in response to environmental damage to Oklahoma's water. The next phase in permitting and enforcement is now underway. The development of a watershed approach will better prioritize facilities and make better use of limited funds.

Public Water Supply engineers are making more compliance assistance visits and completing more sanitary surveys than ever before. These assistance activities are designed to help drinking water systems comply with the new federal regulations. ■

Completion of Five DWSRF Projects in Fiscal Year 2004



Water is pumped out to remove sand and silt from the El Reno well.

The Drinking Water State Revolving Fund (DWSRF) is a low interest loan program created to assist municipalities and rural water districts with water system improvement projects. The DWSRF loan program is financed through an EPA grant and is jointly managed by DEQ and the Oklahoma Water Resources Board (OWRB).

Recently five projects have been completed and are in operation: El Reno Municipal Authority, Bartlesville Municipal Authority, Cushing Municipal Authority, LeFlore Rural Water District # 14, and Mangum Utilities Authority.

El Reno Municipal Authority began construction in January of 2003 and com-

pleted the \$1,607,884 project in December of 2003. The project included the drilling of four new wells and installation of 15,600 linear feet of water line to connect the new well field to the existing water plant. This increased the available raw water intake capability to more closely match the capacity of their water treatment facility.

In March of 2004, Bartlesville Municipal Authority completed the installation of 45,400 feet of 12-inch water line and a 500,000 gallon elevated storage tank on which construction began in December 2002. The project was needed to provide water to an area previously not served by the Bartlesville Municipal



Completed foundation for LeFlore County RWD #14's future water storage tank.

Authority. The cost of this project was \$1,864,514.

Cushing Municipal Authority secured a \$4,607,065 DWSRF low interest loan to construct a new water treatment plant, eight new wells, an elevated water storage tank, and approximately 42,500 feet of water line to serve the City of Cushing. The new plant and water wells replaced a 70-year old surface water system that failed to meet DEQ standards. The new plant was carefully tailored to meet Cushing's needs and comply with new state and federal regulations. The project was completed in October 2003.

LeFlore County Rural Water District #14 constructed a new 100,000-gallon water storage tank, booster pump station improvements, and 84,860 feet of water line to improve pressure and serve approximately 200 new customers. The improvements were funded by a \$500,000 DWSRF low interest loan. The completed project was put on line to serve

the District's customers in October 2003.

Mangum Utilities Authority's construction of two new wells and replacement of water lines began in June 2001. Completed in June of 2004 at a cost of \$2,100,000, the project allowed Mangum Utilities Authority to remove wells that were high in nitrates from the system.

The Safe Drinking Water Act (SDWA) Amendments of 1996 authorized DWSRF programs to assist public water systems in financing the cost of replacement and repair of drinking water infrastructure to achieve or maintain compliance with the SDWA requirements and to protect public health. The DWSRF program will continue to provide low interest loans to help insure that drinking water supplies remain safe and affordable and that the systems that receive funding will be properly operated and maintained. ■

\$100 Million Increase in Revenue Bonds Planned



Artist rendition of Bartlesville's new water treatment plant.

Demand for funding through the Drinking Water State Revolving Fund (DWSRF) Program has increased substantially for fiscal years 2004 and 2005. As a result, DEQ and the Oklahoma Water Resources Board (OWRB) issued \$122,910,000 in DWSRF Revenue Bonds last year and plan to add \$100,000,000 during the next year. Previously the DWSRF program was limited in the amount of loans that could be approved. This made it very difficult to provide help for many midsize communities. The added infusion of funds through issuance of bonds, coupled with the ability to continue to offer an interest rate at 70 percent of the average bond rate, has made the DWSRF program very popular to those seeking funding for water infrastructure improvements.

Recently, the DWSRF program completed its largest loan to date: \$45,510,000 to the City of Bartlesville. The loan will allow Bartlesville to construct a new water treatment plant that will meet its demand for the next 20 years. In addition, it will allow the city to decommission its old plant, which was undersized and not able to meet the new more stringent requirements of the Safe Drinking Water Act (SDWA).

Loans to midsize communities such as Bartlesville, Edmond, Stillwater and Bethany help to provide a stable loan portfolio. This will allow the program to grow and continue to provide more loans to those communities that need a low interest loan program to help them comply with new regulations and provide a high quality product. ■

DEQ 'Rains Down' in Stormwater Outreach

As the old saying states "when it rains, it pours," but where does it go? Stormwater run-off has recently become an issue of great concern throughout the environmental realm. Increased regulations and enforcement have left much of the regulated community trying to stay afloat. In order to assist the community with understanding new permitting and compliance regulations, the Water Pollution Control – Industrial Wastewater and Stormwater Enforcement Section conducted outreach to developers and home building industry representatives in January of 2004. With the assistance of Environmental Complaints and Local Services (ECLS) and legal staff, training was provided on topics that included permits and processing, elements of stormwater pollution prevention plans, compliance with regulations, and compliance assistance and enforcement. Making presentations during the outreach effort were Wayne T. Craney, Section Manager, Acacia Croy, Environmental Specialist, Bob Giger and Joe Don Willingham, District Representatives, and Matt Caves, Attorney.

In order to reach as much of the regulated community as possible, two outreach efforts were held. The first was in Tulsa at the Mohawk Water Plant and the second in Oklahoma City at the DEQ building. Approximately 70 industry representatives were in attendance at each meeting. There was good interaction between DEQ personnel and those in attendance with questions asked during each presentation. Following each meeting, a panel of the presenters was held, which included discussion on a variety of topics including the common plan of development, transfer of ownership

and, filing of Notices of Intent and Notices of Termination. Both DEQ and the industry representatives feel that the outreach was a great success. ■



Joe Willingham explains erosion control techniques.



Developers and homebuilders learn new stormwater permitting and compliance regulations.

2004 Water Quality Assessment Integrated Report

The Water Quality Division announces the release of the 2004 Integrated Water Quality Assessment Report. This report involves the efforts of several state and federal agencies and continues to evolve and improve upon the state's science-based process of assessing the quality of its waters.

The Integrated Report combines the biennial 305(b) Water

Quality Assessment Report and the 303(d) Impaired Waters List. The report assesses the quality of water and categorizes the water bodies according to the below criteria, which satisfies all reporting requirements under 303(d) and 305(b).

- Category 1 - Attaining the water quality standard and no use is threatened.
- Category 2 - Attaining some of the designated uses; no use is threatened; and insufficient or no data and information is available to determine if the remaining uses are attained or threatened.
- Category 3 - Insufficient or no data and information to determine if any designated use is attained.
- Category 4 - Impaired or threatened for one or more designated uses but does not require the development of a Total Maximum Daily Load (TMDL).
- Category 5 - The water quality standard is not attained. The water

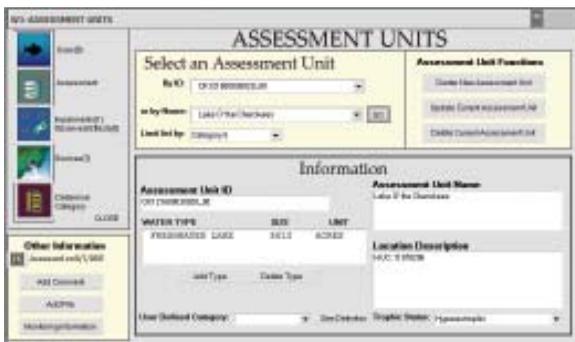
body is impaired or threatened for one or more designated uses by a pollutant(s).

For water bodies in the Category 5-303(d) list, the Clean Water Act requires that a pollutant load reduction plan or TMDL be developed to correct each impairment. TMDLs must document the nature of the water quality impairment, determine the maximum amount of a pollutant that can be discharged and still meet standards, and identify allowable loads from the contributing sources.

One benefit of the Integrated Report is that TMDLs will be scheduled for waters in the Category 5 303(d) list according to a priority ranking, which will take into account the severity of the impairments, the designated uses of the waters, resource requirements and limitations, and relation to ongoing work. Projects designed to collect data for water bodies in other categories will be scheduled according to a separate priority ranking with similar considerations.

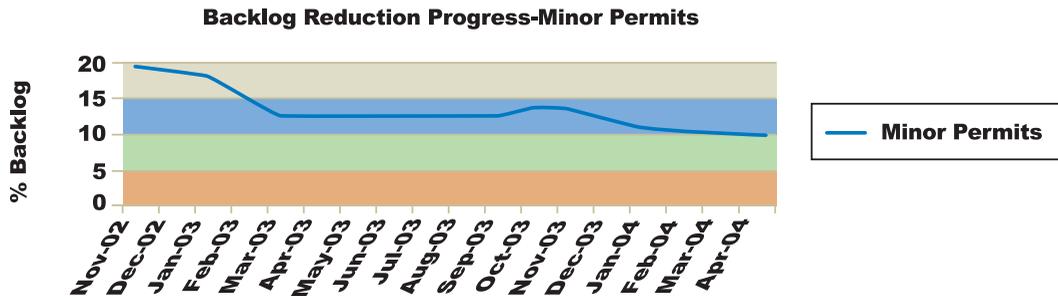
Improvements also have been made in the infrastructure that warehouses the water body assessment data. The Assessment Database, or ADB, is an essential tool in the 2004 Water Quality Assessment Report Process. This powerful tool allows for quick and easy retrieval of information on each of the over 4,000 water bodies delineated in the state. Information such as category determination, monitoring information, size, location, beneficial use attainment, and cause and source information can be readily accessed using this database.

By using this database, and through the Integrated Report, DEQ will continue to monitor and assess all water bodies in order to protect and restore their designated uses, and ensure their preservation for future generations to enjoy. ■



Screen view of the
Assessment
Database.

Progress Made on Minor Permit Backlog



Backlog Reduction Progress – Minor Permits.

If a permit has not been issued within six months of the expiration date, it is considered to be “backlogged”; once the permit has been issued it is considered “current”. In recent years there has been a major thrust within EPA and DEQ to reduce the number of Major permits waiting to be issued (those that are backlogged) and to maintain a 90 percent or greater “Current Permit” status. Through concentrated efforts within the Water Quality Division (WQD) Permitting Section, the backlog of Major permits was reduced below the EPA required 10 percent and has consistently remained between 8-12 percent backlog. This means that, on average, 88-92 percent of all Major permits are current.

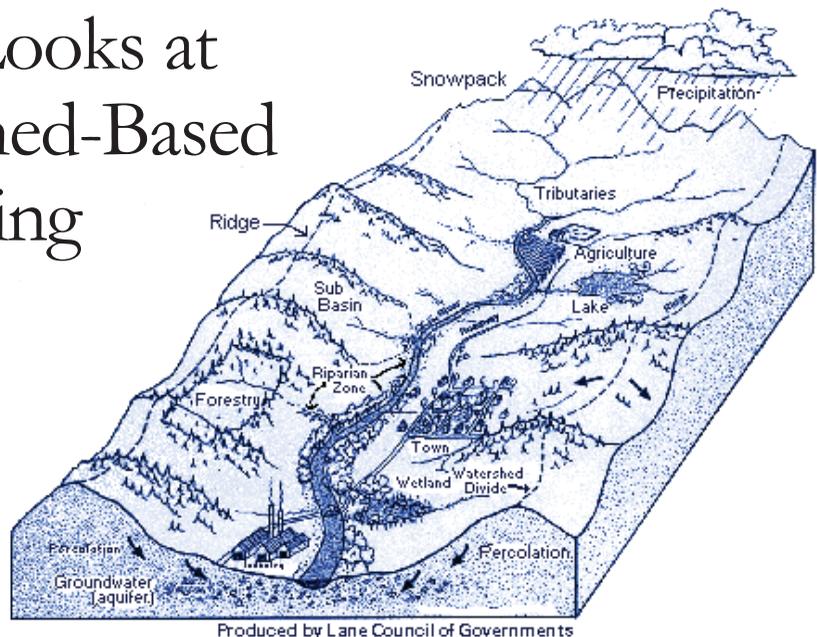
Upon achieving the goal of 90 percent Current Major permits, EPA shifted attention to **Minor** permits, and a similar goal has been established. The goal set by EPA for the states was a 90 percent current status for Minor Permits by the

end of 2004. This translated to achieving less than a 10 percent Minor permit backlog during the year.

This may seem to be a simple goal to achieve; however, many of the expired Minor permits had been delayed for various reasons. These included the need for additional monitoring data such as Total Maximum Daily Loads (TMDLs), use attainability analyses, or other issues requiring negotiations with EPA or the permitted facilities. Even with these obstacles, DEQ has reached the 90 percent Current goal for Minor permits ahead of schedule. EPA’s Region 6 National Pollutant Discharge Elimination System Activity Data monthly report for April 2004 noted that Oklahoma DEQ’s backlog for minor permits was 10 percent, or 90 percent current.

DEQ will continue to work on all backlogged permits, major and minor, with the goal of achieving and maintaining the 90 percent current status in both areas. ■

DEQ Looks at Watershed-Based Permitting



A watershed is the land that water flows across or through on its way to a common stream, river, or lake.

National Pollutant Discharge Elimination System (NPDES) permits have been issued by DEQ for several years. Historically these have been issued as individual permits to municipal and industrial facilities on a discharge-by-discharge basis. Until now, there has been no attempt to take into account pollutant contributions from sources other than the discrete point source discharge(s) covered by each permit. However, that is beginning to change. EPA is encouraging states to move to a watershed-based permitting approach.

Watershed-based permitting involves considering all pollutant sources within a specified watershed and writing permits that can help achieve specific environmental goals in the watershed. This shift to watershed-based permitting is being encouraged by EPA as part of a nationwide move toward permitting for environmental results.

Basically, there are six steps involved with a watershed-based permitting strategy:

- Select a watershed and determine its boundaries (an example of a watershed is shown above).
- Identify area stakeholders (parties with interest) and facilitate their participation.
- Collect and analyze data for permit development.
- Develop watershed-based permit conditions and documentation.
- Issue a watershed-based NPDES permit through the permitting process.
- Measure and report progress.

The move to watershed-based permitting is an involved process and will not take place overnight. The first steps are to develop a watershed-based permitting strategy. Once the strategy has been developed for the selected watershed, it could be applied to other areas across the state. Work on watershed-based permitting for these areas would begin as other good candidates for this permitting approach are identified. ■

Public Water Supply Security

The security of public water supplies is critical for several reasons.

The most obvious is the damage that could occur if a toxic substance with the potential to cause illness or loss of life were introduced into a water system. Another critical use of public water supplies is for firefighting. If the water system were disrupted at the same time that fires erupt due to terrorist activity, the resulting damage could be much greater. Yet another critical public health area is sewage disposal. If water supplies were disrupted, resulting in the inability to properly dispose of sewage, the risk to public health is greatly increased.

Safe drinking water is a critical resource that is essential to public health and safety. To address the need to ensure protection of this resource, Congress passed the Bioterrorism Act in response to the events of September 11, 2001. This Act requires that public water supply systems serving over 3,300 in population must perform vulnerability assessments and update emergency response plans to address vulnerabilities identified in their water system.

In Oklahoma, many water systems have emergency response plans in effect, but may need to update them to address any newly discovered vulnerability. Some small systems did not have an existing emergency response plan prior to the passing of the Act, but would be required to assess vulnerabilities and develop a plan according to the Act.

The Bioterrorism Act mandates that water systems complete vulnerability assessments and submit them to EPA by June 30, 2004. Congress pro-



vided funding to large systems to perform vulnerability assessments and update emergency response plans. Six large water plants serving over 100,000 in population applied to EPA for grants to perform Vulnerability Assessments and Emergency Plan updates. All six systems received grants and completed their Vulnerability Assessments. All the large and medium water systems in Oklahoma have met this deadline.

For small and medium systems, DEQ performed the following tasks: updated its model emergency plan and posted it to DEQ web site; distributed a small water system self-assessment document; established an emergency email notification system to water systems in the event of a threat or emergency; and, provided technical assistance to water systems in the completion of their security vulnerability assessments and updated emergency plans. The DEQ Water Quality Division (WQD) implemented the technical assistance program to both small and medium water systems throughout the state. In addition, the WQD developed self-assessment templates suitable for Oklahoma water sys-

Debi Branch works in the State Environmental Laboratory.

tems and continues to provide on-site technical assistance to water systems to complete the required documents.

DEQ also purchased laboratory equipment for the State Environmental Laboratory for use in rapid determination of potentially toxic compounds. This equipment will allow DEQ to respond more rapidly to potential contamination incidents and to determine if toxic substances have been introduced into a public water supply.

Once vulnerability assessments have been completed, the Bioterrorism Act also mandates that water systems make updates to their emergency response plans within six months of their assessment submittal to EPA. Water systems also must submit a certification to EPA that the plans have been updated by December 31, 2004. With the continued cooperative effort between facilities and DEQ, all water facilities in Oklahoma that fall under the requirements will have updated plans in place. ■

Ground Water Monitoring

Water is considered to be one of the most precious natural resources we possess. We all play a part in the continued efforts to protect this resource. Part of the ground water effort in Oklahoma includes monitoring the resource for quality. During the past year, the Water Quality Division concluded several monitoring studies for determining water quality in specific areas and one that was statewide in scope. Upon completion of the studies, reports concerning the findings were posted to the DEQ web site at www.deq.state.ok.us. In order to view reports about ground water monitoring, select the "Water Quality" section and look under Publications. Monitoring reports included in this section are:

- USGS Scientific Investigations Report 2004-5060 - Chloride in Ground Water and Surface Water in the Vicinity of Selected Surface-Water Sampling Sites of the Beneficial Use Monitoring Program of Oklahoma, 2003 (Cooperator with the USGS)

- Statistical Evaluation of Public Water Supply Data - Statewide Groundwater Monitoring Project for Oklahoma (measured some secondary standards in public water supply wells, completed by DEQ)
- Hydrology and Ground-Water Quality in the Mine Workings within the Picher Mining District, Northeastern Oklahoma, 2002-03 (Cooperator with USGS)

These reports may be found at the Internet sites indicated below:

- Assessment and Comparison of 1976-77 and 2002 Water Quality in Mineshafts in the Picher Mining District, Northeastern Oklahoma and Southeastern Kansas (Cooperator with USGS) <http://water.usgs.gov/pubs/wri/wri034248>
- Reconnaissance of Surface-Water Quality and Possible Sources of Nutrients and Bacteria in the Turkey Creek Watershed, Northwest Oklahoma, 2002-2003 <http://water.usgs.gov/pubs/sir/2004/5039> ■

DEQ Implements the Oklahoma State STORET Program

The Department of Environmental Quality has recently implemented a state STORET (Storage and Retrieval) Program for the state of Oklahoma designed to meet state, federal and local needs concerning environmental monitoring data. State STORET is being pursued to promote data standardization and proper documentation of monitoring activities among various environmental groups within Oklahoma.

With the goal of providing access to standardized environmental monitoring data, DEQ will administer the state STORET Program in a manner that promotes partnerships among the various environmental groups within the state. While the primary targets are state environmental agencies, DEQ is actively pursuing other data partners, including those from tribal and local environmental programs.



Oklahoma state STORET Program DEQ.

While achieving state objectives we also are providing support for the national STORET effort currently being pursued by EPA. Once completed, the STORET program will provide accessibility to monitoring data from all data partners and EPA, allowing all partners to better utilize monitoring data archives and resources. ■

Environmental Management Through GIS

The Department of Environmental Quality has a long history of utilizing Geographic Information Systems (GIS) in support of multiple environmental programs and to meet the information needs of environmental planners. To further support these efforts, DEQ has recently added several tools that will enhance the ability to utilize spatially oriented data for environmental evaluation and planning.

Modifications made to the *DEQ Data Viewer* include a more extensive

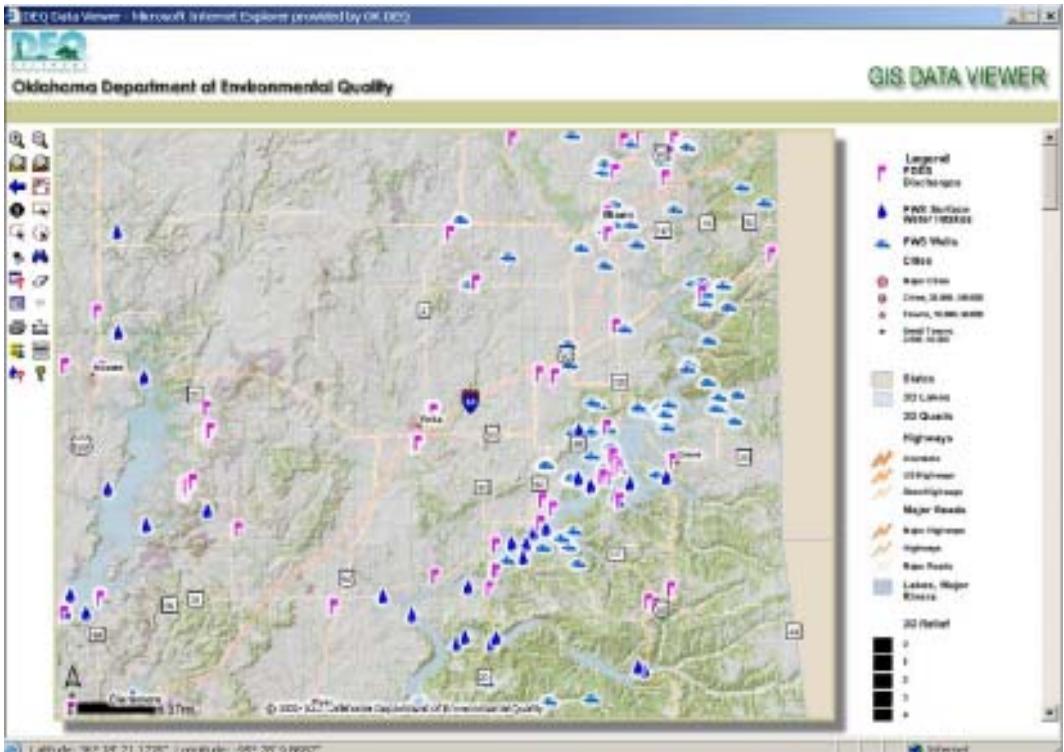
set of tools for obtaining information concerning regulated activities, water quality monitoring data, and basic geographical information. By simply going to DEQ's main web page at www.deq.state.ok.us and selecting the Oklahoma Monitoring Data option, users can easily view, query, and utilize a wide range of environmental data.

In addition, our local field personnel have been equipped with Global Positioning System (GPS) devices to allow

the collection of highly accurate location data. This tool will greatly enhance the ability of staff to quickly respond to emergency situations and perform other daily duties such as inspections and complaint responses.

DEQ continues to promote the use of GIS as a valuable informational tool. Most recently, Water Quality Division staff attended the 9th Annual Inter-Tribal

Environmental Council (ITEC) Conference where they demonstrated the ease of accessing environmental data through GIS tools such as the *DEQ Data Viewer*. Those attending were shown how useful GIS can be in adding a visual component, which allows environmental planners to quickly and efficiently evaluate data to address environmental concerns and plan accordingly. ■



DEQ Data Viewer.



Utilizing GPS for emergency response.



Public outreach promoting GIS at ITEC.

Streamlining the Inspection Process

It's often said that necessity is the mother of invention. Such is the case when it comes to the Pretreatment Compliance Inspections (PCIs) that the Water Quality Division (WQD) performs annually. An effective pretreatment program is designed to help protect the community-owned wastewater treatment system from the introduction of harmful or untreatable chemicals, which could ultimately lead to adverse effects to downstream aquatic life. Inspections of these programs are designed to evaluate how well some of Oklahoma's larger communities are dealing with industrial contributors to their respective wastewater treatment systems. This process involves reviewing the discharge permits that the communities have issued to their local industries and the enforcement process followed by the communities to ensure compliance with these permits.

However, this inspection process can become cumbersome; WQD staff decided that there had to be a better way. During fiscal year 2004, WQD began a cooperative effort with EPA Region 6 to revise the PCI form and streamline the

way these inspections are performed. Through a series of meetings and discussions between the two agencies, the existing nine-page PCI form was revised and its total length reduced to only four pages. Even with this reduction, the form maintained its ability to thoroughly evaluate all the same key program areas. In addition, the WQD is reallocating its personnel resources to allow more inspectors to participate in the PCI process while freeing others to focus on different aspects of the pretreatment program.

EPA began these discussions skeptical of changes to what it viewed as an abridged PCI form. Through hard work and cooperation, WQD staff has gained EPA approval of the new shorter inspection form. Inspectors will begin to utilize this streamlined inspection process in FY 2005, which should allow for better utilization of DEQ resources, as outlined above. For its part, EPA has not only accepted the streamlined form, but has indicated an interest in sharing the form with the other state environmental agencies throughout Region 6. ■

Cover page of revised Pretreatment Compliance Inspection (PCI) report form.



Municipal Pretreatment Coordinator David Hardgrave worked extensively on the revised PCI report form.

Keeping the State Parks Beautiful

Almost every Oklahoman has fond memories of spending sun-soaked summer weekends at one of the 50 state parks across the state of Oklahoma. From fishing and boating, to camping and hiking, Oklahoma state parks offer all sorts of outdoor activities and access to some of Oklahoma's most beautiful natural resources. However, because of increased usage and outdated facilities, some of these resources have been put in jeopardy. Within the last few years, DEQ and the Oklahoma Tourism and Recreation Department (OTRD) realized that something had to be done if we were to preserve this resource for our future. If actions weren't taken to improve the deficient wastewater treatment

facilities at several of Oklahoma's state parks, an environmental disaster would be just around the corner.

During this first phase, DEQ and OTRD focused their efforts on the wastewater systems at three of the larger state parks: Lake Texoma, Lake Tenkiller, and Sequoyah. All three systems were either failing or in need of critical upgrades to avoid serious degradation of these great recreational lakes. Working together, the two agencies developed a schedule for the projects to restore the facilities. OTRD hired engineering consultants to evaluate the facilities at the three state parks, and DEQ provided the technical assistance necessary to move

Continued on next page



A view of Lake Tenkiller from the Hickory Flats campground (June 29, 2004)

the projects forward. Working cooperatively, along with the state legislature, the agencies identified and secured a funding package of over \$7 million to allow these projects to proceed.

Currently, upgrades at Lake Tenkiller State Park are well underway, while portions of the improvements at Sequoyah State Park are under construction. Engineering design for an entirely

new wastewater treatment system to serve Lake Texoma State Park also is moving forward. The new wastewater treatment facilities are scheduled to be completed in time for the 2005 tourist season. With continued teamwork between the agencies, these three Oklahoma gems will again safely serve the needs of Oklahomans and welcome visitors from around the country. ■



Entrance to Tenkiller State Park (June 29, 2004)



Construction of one of the new lagoon cells at Lake Tenkiller State Park (May 4, 2004).



Water Quality Division Software Development

At one time, in the not so distant past, a single computer encompassed an entire room, and obtaining information took days or even weeks. Now computers fit on our desktops and even in our laps and we can retrieve information almost instantly at the touch of a button. In trying to stay at the forefront of the informational and technological needs, DEQ has been making strides to build software that meets the needs of the user. Currently, the Water Quality Division is focusing on completing eight essential tasks:

1. Oklahoma Pollutant Discharge Elimination System (OPDES) Enforcement - provide up-to-date reporting capabilities for management and ability for users to update and maintain the data
2. OPDES Permitting - provide capability to track permits throughout the entire agency for both municipal and industrial permits
3. OPDES Compliance - provide users the ability to update and maintain compliance data
4. Permit Compliance System (PCS) - develop the capability to provide EPA a data file with required data for OPDES permitting (on a monthly basis)
5. Electronic Discharge Monitoring Report/Electronic Monthly Operating Report (eDMR/eMOR) - develop the capability to receive monthly reports via

6. Stormwater Notice of Intent/Notice of Termination (NOI/NOT) - develop the capability to receive stormwater forms on-line via the Internet
7. Safe Drinking Water Information System (SDWIS) - ensure that the EPA-led development process for SDWIS meets the projects needs
8. Invoicing - develop processes to invoice customers in a timely manner.

The primary goal of these efforts is to build software that allows us to move to a more integrated system throughout the entire DEQ. Specifically, the goal is to build software that can be easily modified and linked together to provide current information throughout DEQ, to EPA, and to the public. This will not only improve our ability to track regulated facilities throughout DEQ, but will improve our ability to make environmental decisions that could impact all media types (Land, Air, and Water).

At this time, the Water Quality Division has moved forward on several fronts. The division has implemented SDWIS, which now has the ability to produce a complete data export that meets the needs and goals of EPA. In addition, current SDWIS information can be accessed through the Internet, where users can view the compliance history of water systems throughout the state. ■

Area Wide Optimization Program Training

The Area Wide Optimization Program (AWOP) is dedicated to evaluating and optimizing the performance at existing surface water treatment facilities in order to maximize public health protection from microbial contaminants.

Members of AWOP from the Water Quality Division hosted a Disinfection Byproducts - Comprehensive Performance Evaluation (DBP-CPE) training in Broken Bow, Oklahoma, February 10-13, 2004. This was the first such training to be conducted in EPA's Region 6; it was attended by professionals from Alabama, Arkansas, Louisiana, Oklahoma, EPA's offices in Dallas and Cincinnati, and Process Applications, Inc., from Colorado.

During an evaluation the members were divided into four teams: Chlorine Application, Total Organic Carbon Removal, Distribution System, and Performance Data. Each team was assigned tasks to complete during the week to help determine what might be limiting the water system from meeting its optimized goals.

Upon completion, the findings from the evaluation were communicated to the water facility through an oral presentation and a written report. Factors that might be limiting

the system from meeting some of the optimized goals were noted to the facility for consideration. Through this type of training, DEQ employees will become better prepared to conduct performance evaluations and assist facilities with achieving optimized goals. ■



DEQ employee conducting lab tests to assist in determining system performance.

Water Quality is On-line with Operator Certification



Marcus Watson, Line Maintenance Operator, Oklahoma City, taking an Internet exam.

Over the past year, the Water Quality Division has taken great strides in the advancement of the Operator Certification Program. The most noticeable advancement is in the test administration area. In September of 2002, the certification program began to quietly pilot test a new program to administer certification exams via the Internet. After two months of limited testing the program was made available

to all water, wastewater, and laboratory operators. Now, just a year later, the program has met with unimaginable success. Today over 75 percent of all operators who take certification exams do so over the Internet.

By offering this type of testing, DEQ has streamlined the certification process. Operators now have the opportunity to test directly following the instructional course and receive instant results. However, instant results are just one of the advantages of taking the test in this manner. Not only do operators immediately know their scores, but they can take the results to their employers for proof of qualifications and eliminate the need to schedule additional time off and extra trips to complete the test and certification process.

If you wish to take a sample on-line test, go to the DEQ web page at (www.deq.state.ok.us), click on Water Quality - Programs and then go to the Operator Certification section. There you will find "Sample Water On-line Web Test"; insert your name and you're on your way. ■



H₂Oklahoma Festival



The H₂Oklahoma Festival is a celebration to raise the awareness of the importance of Oklahoma's water to 5th grade students. Each year it is held in different watersheds across the state. This year, it was held September 23, 2003, at the Barron Fork Watershed with the help of 22 DEQ employees. The Oklahoma Environmental Education Coordinating Committee sponsors this event, but every year DEQ takes the lead in organizing and implementing the festival. Employees from every division work at the festival to help students learn about water history, resources and conservation.

Just imagine being turned into a drop of water. Evaporation takes you into the clouds and you travel through the amazing world of Willie Waterdrop's excellent adventure learning about the water cycle by running through a full-size obstacle course. Next, you learn about water conservation firsthand when you participate in the "Long Haul" and reenact how water was carried to homes before indoor plumbing. Or, you could find yourself in a Court of Law listening to DEQ attorneys arguing a water rights case with students as the jury. Listen to DEQ's own *Muddy Rivers* and hear stories about water and learn interesting things. Compete in the H₂Olympics and

learn about the properties of water. Make and eat your own wetland while learning about how important wetlands are to Oklahoma. Use your creativity to make rainsticks or to carve water messages in stone. Spin a dial and you travel on an *Incredible Journey* through the water cycle making a bracelet that represents each area where you traveled. These activities mentioned were made possible by DEQ volunteers. Each activity at the Festival was designed to educate the students about water in a fun and memorable way. Other activity stations were sponsored by other state agencies.

The H₂Oklahoma Festival is an example of DEQ employees working in cooperation with the Office of the Secretary of Environment and the Oklahoma Environmental Education Coordinating Committee to celebrate Oklahoma's water resources. The Oklahoma Environmental Education Coordinating Committee is comprised of members from the Conservation Commission, Department of Agriculture Forestry Services, Department of Environmental Quality, Department of Tourism and Recreation, Department of Transportation, Department of Wildlife Conservation, Natural Resources Conservation Service, State Department of Education, U.S. Fish and Wildlife Service and the Water Resources Board. ■