

Strategic Plan



Little Rock
Wastewater

Strategic Plan

Mission Statement

The mission of Little Rock Wastewater is to provide low-cost, safe, high-quality sanitary sewer service to the citizens of Little Rock, Arkansas, and, through planning and support, the orderly growth of the city with the overall objective of preserving the health and well being of the citizens and the environment.

Strategic Plan FY 2009-2010

Managers and directors play an active role in the strategic planning process by identifying problem areas, defining plans for addressing various issues within each section, and establishing priorities. Internal and external issues in administration, information services, finance, operations, maintenance, communications, legal, human resources, and environmental services are considered and addressed. The internal process includes the development of goals and objectives, performance measures, and accomplishments. This process allows managers an opportunity to provide policy recommendations that are considered by the Little Rock Sanitary Sewer Committee. The Strategic Plan is monitored by staff on an ongoing basis to ensure compliance and implementation.

During the planning process for 2010, LRW determined that the most significant issues centered on financial planning, the System Evaluation and Capacity Assurance Plan (SECAP) issues, sanitary sewer overflows, infrastructure, new facilities, community relations, asset management, and funding requirements. The updated plan identifies the driving forces that have an impact on LRW, and addresses how LRW should proactively deal with these driving forces on a prioritized basis:

- Organization needs
- Needed rate adjustments for 2010
- Financial planning
- New facilities becoming operational
 - Peak Flow Attenuation Facilities
 - Little Maumelle Wastewater Treatment Facility
- Replacement of infrastructure required to eliminate sanitary sewer overflows
- Community relations

LRW also identified factors that contribute most critically to the future success of the organization and create an environment of understanding of what needs to be done. These critical success factors fall into six major categories: quality, communications, asset management, organization, financial, and regulatory.

Quality

- Maintain high quality and reliable service.
- Use available technology to enhance LRW's ability to provide superior service.

- Continue to provide training to all employees for professional development.
- Maintain a safe work environment.

Communications

- Establish and maintain a high level of community support and customer satisfaction for both internal and external customers.
- Maintain public education programs.
- Empower employees through the Team Max effort.
- Maintain public awareness of events and programs.
- Maintain employee awareness programs.

Asset Management

- Secure the financing to construct the necessary infrastructure to meet the requirements of the SECAP and continue rehabilitation of infrastructure.
- Continue to demonstrate leadership, expertise and excellence in planning, engineering, and operations management.
- Work with the City to implement the recommendations of the Rate Advisory Committee.
- Construct facilities necessary to meet the demands of the City of Little Rock.
- Maintain acceptable condition of all LRW infrastructure.

Organization Management

- Recognize, plan and implement succession planning.
- Optimize the use of limited resources.
- Evaluate staffing needs for meeting the demands for service, operation, and maintenance of new facilities.

Financial

- Ensure LRW continues to meet its fiduciary responsibility in providing wastewater service for the lowest rates possible.
- Work with the City to implement the recommended rate increases for 2010.
- Optimize financial reporting to support LRW's Capital Improvement Plan and Operating Plan.

Regulatory

- Reduce sanitary sewer overflows.
- Maintain NPDES permit requirements.

Goals FY 2010

Quality

- Collaborate and implement online new employee safety and health orientation training.
- Update and print Employee Safety Manual in booklet form for field crew usage and vehicle storage.
- Obtain 1926 and 1910 OSHA certifications for safety staff.

- Implement Accident Free Safety Jamboree incentive program while maintaining a frequency rate of less than the national average of 6.5.
- Continue to build on professional development plan for executive, managerial, and supervisory employees.
- Maintain Workers Compensation Self-Insured status.
- Complete upgrade of the permit desk process within the Hansen application.
- Complete implementation of IMS v8.
- Continue classroom training for CCTV Operators.
- Continue establishing strategies to meet the “Target Zero” goal.
- Continue implementing and issuing laptop computers to field crews.
- Manage strategies for the conversion the IMS Version 8 (IMS v8) work order management system.
- Replace and maintain safety equipment as needed.
- Continue training and development opportunities that are necessary for striving toward an accident-free environment.
- Meet or exceed the set task goals.
- Provide Advanced Equipment and Procedures training to maintenance personnel.
- Maintain/Increase current goals.
- Continually improve the Facilities Management System.
- Implement a new Service Line Policy.
- No lost-time accidents.
- Continue professional training and certification in Corrosion Control and Industrial Coating Technologies.
- Continue to provide advanced education to personnel involved in areas of maintenance that require specialty training.
- Operational training and data/form transition to Hach WICMS and IMS V8 programs upgrades.
- Submit programs for national recognition.
- Continual training of personnel in all aspects within the Finance division.
- Implementation of SCADA at Fourche Creek Wastewater Treatment Facility, Little Maumelle Wastewater Treatment Facility, Little Maumelle Pump Station, and Arch Street Pump Station.
- Upgrade domain functional level to Windows Service 2008.
- Upgrade Cisco BoIP to latest and Client O/S to Windows 7.
- Complete conversion of GIS custom tools to .Net.
- Continuation of internal cross training and formal education of the Operations Staff.

Communications

- Plan and coordinate Little Maumelle Wastewater Treatment Facility grand opening/ribbon cutting ceremony.
- Develop and coordinate LRW 75th Anniversary monthly activities and celebration event.

- Develop and implement public outreach and education strategy for Captain Sewer, Can the Grease, and Stay Connected – Service Line Inspection programs through print and television media.
- Enhance Customer Assistance program to more effectively address and follow-up customer complaints and damage claims while assisting field inspectors and engineering staff with neighborhood communication through publications and website.
- Continue employee activities and community involvement programs.
- Maintain administrative services to all divisions through coordination of front desk scheduling.
- Develop additional functionality for published Geographical Information System (GIS) web site to enable internal and external users enhanced GIS capabilities.
- Promote the “Team Max” effort.
- Continue communication between Operations and the Maintenance department regarding the daily and bi-weekly maintenance procedures.
- Continue to promote a “Team Max” effort throughout LRW.

Asset Management

- Issue bonds/revolving loan funds as planned and budgeted.
- Seek request for proposals in regard to fuel system and related services for fleet.
- Complete the design and construction management required to place new energy saving blower equipment in service at the Adams Field WWTF.
- Continue construction project management to ensure continuing progress associated with the Capital Improvement Plan.
- Produce a revised 5-year Capital Improvement Plan based on the amended SECAP report.
- Assist in the development and implementation of the service line replacement policy.
- Reduce current ArcView licensing by at least two-thirds of current users to reduce support cost and encourage use of new website.
- Replace all gas leak sensors within the FCWWTF Generator building and Digester Complex to regain reliability and system performance.
- Develop 2010 Large Line Cleaning Contract for large diameter sewer main lines.
- Develop 2010 Chemical Root Treatment Contract.
- Improve Preventive Maintenance schedules to ensure maximum efficiency.
- Clean 3.7 million feet of line.
- TV 840,000 feet of line.
- Walk 10,800 feet of main line.
- Clear 665,000 feet of right-of-way.
- Replace one combination cleaning truck.
- Repair 168 broken sewer mainlines.
- Repair/Replace 264 service lines.
- Seal 168 old service lines.
- Adjust 216 manholes.
- Rehabilitate 2,280 vertical feet of manholes.
- Complete \$2,000,000 of IWO for Capital Projects.

- Replace a two-ton dump truck (Vehicle # 0895).
- Replace asphalt roller (Equipment # 0929).
- Repair areas in the front parking lot of the Clearwater Maintenance Facility.
- Purchase two grade lights/lasers.
- Replace/Update equipment as needed.
- No dry-weather overflows due to equipment malfunctions.
- Maintain 45 days for “no pump out of service” at pump stations.
- Proactive/Preventive Maintenance = 86.5%; Reactive Maintenance = 13.5%.
- Continue to have “low man-hours required” on all HVAC efforts.
- Continue inspections of all Fourche Creek Clarifiers for annual repairs.
- Continue to maintain a successful Industrial Coating and Corrosion Control Maintenance Program.
- Replace, upgrade, and maintain equipment as needed in order to provide a safe, quality, and efficient service to the citizens of Little Rock.
- Continue to conduct studies of possible future Sludge Handling Process and Technologies.
- Implement and manage a new Preventive Maintenance Plan for all new facilities and equipment as these projects come into service.
- Work with engineering firms to facilitate the Fourche Creek Wastewater Treatment Facility Upgrade efforts.
- Installation of a 30” force main to parallel the existing 42” line from Arch Street Pump Station to Fourche Creek WWTF, increasing transportation capacities to 45 mgd.
- Installation of a 170 ft diameter secondary clarifier to enhance secondary treatment capabilities of FCWWTF to over 54 mgd.
- Revamping of the Chlorine Response Plan to facilitate chlorine\de-chlorination retrofits at the Fourche Creek WWTF.
- Defining operation control and strategies of the Peak Attenuation Basin.
- Little Maumelle WWTP plant startup.
- Replace aging test equipment with newer models to increase testing efficiencies and prevent data losses due to equipment failures.
- Develop a Plan of Action to implement a rate structure for commercial and industrial user classifications.

Organization Management

- Implement a Workforce Development program that is fast emerging as a planning tool within LRW and human resources.
- Restructure management personnel.
- Aid in planning and restructuring the Maintenance departments.
- Evaluate departmental personnel, positions, and compensation based on expertise, job functions, and assigned responsibilities on an as-needed basis relating to position upgrades.
- Additional personnel will be hired to meet the increased WWTF sampling requirements when the Little Maumelle Wastewater Treatment Plant (LMWTF) is operational. Sampling Staff will be required to travel approximately 30 miles one way between the LRW Laboratory and the LMWTF at least four days per week.

Financial

- Update financial plan to ensure LRW continues to meet its fiduciary responsibility in providing wastewater service to its customers for the lowest rates possible.
- Implement the approved 5% wastewater rate increase.
- Work with LRW divisions on improving cost saving programs.
- Provide Engineering support for capital financing studies and applications while improving the forecasting of required capital.

Regulatory

- Reduce Sanitary Sewer Overflows (SSO's).
- Enforce federally mandated discharge limits and local discharge limits to prevent the introduction of pollutants into the LRW collection system which can physically pass through or interfere with the treatment processes causing violations to the NPDES Discharge permits and to prevent contamination of the treated wastewater biosolids which would prohibit beneficial reuse.
- Provide quality assured data to the Operations and Pretreatment staff in a timely manner.
- Work to decrease the time between sample collection and issuance of a final report for all monitoring required by the LRW Pretreatment Program.
- Provide sampling and testing assistance to support the Operations special projects and new treatment process evaluations.
- Continue streamlining the pretreatment reporting processes for sampling and laboratory forms to increase the efficiency of data management.
- Proceed to increase requirement letters sent to commercial facilities to upgrade grease interceptors that have been identified as substandard and incapable or proper grease retaining.
- Develop sampling protocol for LMWWTF.

Achievements FY 2009

Quality

- Facilitated and/or coordinated quarterly professional development training for management staff.
- Awarded reduced vehicle insurance premium as a result of safe driving record and aggressive efforts in defensive driving training.
- Awarded the Water Environment Federation George Burke award and the Arkansas Water Environment Association Safety Professional of the Year award for outstanding performance and service in the safety field.
- Coordinated and/or conducted over 2,900 hours of safety related employee certification training while conducting over 1,800 hours of monthly employee safety meetings/training.
- Provided employee health screening and monitoring as required for employee exposure.
- Maintained a frequency rate of 1.0 for work related injuries while reducing the number of lost time work related injuries to one for the calendar year. The national average for frequency is 6.5.

- Accounting received the Certificate of Achievement for Excellence in Financial Reporting for the fifth year in a row from the Government Finance Officers Association based on the Comprehensive Annual Financial Report.
- Purchasing celebrated its 32th year as a member with the National Institute of Governmental Purchasing.
- Through the Universal Public Purchasing Certification Program LRW has four (4) CPPB's (Certified Professional Public Buyers). The Universal Public Purchasing Certification Council recognized LRW for having a fully certified procurement staff in 2008.
- Accounting implemented the eIWO workflow application to automate the approval of all Investment Work Orders.
- Upgraded iFIX from v3.5 to 4.5 for SCADA program to bring system to current.
- Upgraded Geographic Information Systems (GIS) application to v9.3 for 50 workstations and users to current release.
- Implemented new GIS website for better mapping and customer service to internal and external customers.
- Implemented new INFOR/Hansen Enterprise Management Systems for better tracking in the maintenance service area.
- Upgraded Granite software program to enable better utilization of data associated with televised sewer lines and the maintenance software system (Hansen).
- Conducted CCTV Operator Training to include operation manual.
- Provided personnel to serve as departmental representatives for the Hansen 8 Conversion Team.
- Awarded Arkansas Department of Environmental Quality's ENVY Award for Can the Grease public awareness campaign.

Communications

- Successfully updated and implemented employee information guide (handbook) to electronic version.
- Implemented quarterly "Think Tank" team meetings with supervisors and foremen to address safety and health policy issues as they relate to Standard Operating Procedures (SOP).
- Facilitated and/or coordinated several LRW sponsored employee community involvement activities.
- Created, designed and initiated new "Stay Connected" service line inspection public awareness program.
- Increased appearances for Captain Sewer and his First Mate, Stinky, in the elementary school system to promote environmental awareness and water conservation.
- Ribbon Cutting Ceremony for \$33 million dollar Peak Flow facility.
- Created design and edited 2008 Annual Report.
- Successfully completed and distributed employee quarterly newsletter.
- Participated as exhibitor/presenter in several governmental, environmental and trade association exhibits and conferences promoting the wastewater industry and environmental awareness.

- Successfully developed media relationships with monthly press releases and one-on-one communication with reporters.
- Created and developed TV commercial for Can the Grease and Captain Sewer.
- Resolved over 95% of customer calls, complaints and damage claims.
- Assisted with the “Can the Grease” ® program.

Asset Management

- Implemented a 24 hour remote monitoring program for security enhancement.
- Successfully able to maintain Self-Insured status under Workers Compensation criteria.
- Assisted in the implementation of service line inspection pilot study, ordinance development and communications.
- Accounting worked with various key personnel at the local and city level on the issuance of one sewer construction revenue bond and one state revolving loan fund (RLF). The 2009A state RLF was issued in April 20, 2009 in the amount of \$8,000,000 for the Arch Street Pump Station Upgrade. The 2009B Sewer Construction Revenue Bond was issued in December 2009 in the amount of \$6,580,000 for construction costs related to the upgrade at Fourche Creek Wastewater Treatment Facility.
- Accounting also worked with a Rate Advisory Committee and Raftelis Financial Consultants, Inc. of Kansas City, Missouri who reviewed and updated LRW's ancillary charges; conducted a feasibility study of alternative system growth charges; analyzed LRW's cost of wastewater collection, treatment and disposal services; recommended adjustments to wastewater rate structure; and conducted an asset management study in coordination with MWH Global of Broomfield, Colorado.
- Finance implemented the new purchasing software, E-Procurement, to automate the requesting process of Purchase Orders and to record all Purchase Card transactions and supporting documentation.
- Completed construction of the Peak Flow Attenuation Facility and placed the facility into operation.
- Completed the installation of the new gen-set for the Fourche Creek Co-generation Facility and placed the unit into operation.
- Selected a consultant and developed a “Scope of Work” for a formal amendment to the SECAP.
- Provided Engineering support for capital financing studies and loan applications.
- Developed procedures for in-house system evaluation studies.
- Completed the in-house design of three collection system Overflow Mitigation Projects.
- Completed the in-house construction management and inspection of three collection system Overflow Mitigation Projects.
- Developed project specifications and awarded Contracts for the large diameter cleaning and rehabilitation projects.
- Provided engineering design and inspection services for the annual trenchless rehabilitation projects.

- Provided Engineering support to In-house construction crews as required to meet construction production goals
- Connected both chlorinators to the Supervisory Control and Data Acquisition (SCADA) software program at the Fourche Creek Wastewater Treatment Facility. These screen enhancements enable operators to save money on chlorine and comply with new chlorine regulation limits.
- Upgraded all LRW cabling and connections at the Clearwater Maintenance Building to allow for faster network speeds. This was also the last upgrade needed for LRW to accomplish a utility-wide goal of 1 Gigabit Local Area Networks.
- Hardwired the Adams bar screens to the facility PLC network. At the same time updated PLC programming and SCADA screen development to better control the bar screens during low flow periods, as well as provide SCADA alarms if malfunction occurs.
- Installed hardware and software at the Airport East Pump Station to the SCADA system for remote monitoring of alarms and statuses.
- Instrumentation updated the existing Recycle Pump Station bubble-type level control system with a radar transmitter at Fourche Creek Wastewater Treatment Facility by rewiring motor control centers for the two pumps and connecting to the local PLC processor. Department also supplied a new local control panel and provided PLC programming and SCADA screen development to fully automate the recycle pumps.
- Installed six new motorized sluice gate actuators at FCWWTF and provided PLC programming and SCADA screen development so that facility operators can better control the flow through the aeration basin passes, before and after major rain events.
- Provided contractor assistance to fully automate all aspects of the new Peak Flow Facilities that consisted of three diversion structures, a pump station containing three engine-driven pumps, and a 30 MG EQ Basin Facility.
- Provided contractor assistance in creating new software programs called eIWO (Initial Work Orders) and eRequisition (for Purchase Orders and Purchase Card items) that requires electronic signatures and electronic filling on financial items.
- Upgraded AT&T Internet from old technology of 3MG Copper to new technology of 10MG, which will allow LRW to leverage future connection/expansions.
- Upgraded to WIMS v7 SQL from OPS32 to reduce required support.
- Replaced all SCADA cabinet H₂S (Hydrogen Sulfide) scrubbers which protect sensitive electronic components within the corrosive environments.
- Replaced the SCADA spread-spectrum system with newer, faster radios. This system enables remote monitoring and control of the collection systems 25 lift stations with this equipment.
- Developed a contract for cleaning 18 lines ranging in diameter from 30" to 36".
- Conducted in-house cleaning of 36 lines that ranged in diameter from 15" to 30".
- Generated a list of new main lines to add to the current Root Treatment Contract.
- Established Preventive Maintenance schedules for Sewer Lift Stations.
- Modified and increased existing Preventive Maintenance schedules.
- Revised and updated the Maintenance Procedure Manual.

- Created a “Short Book” for crews that includes information about overflow procedures, community service line policy, emergency response plans, and all relative up-to-date attachments.
- Cleaned over 3.6 million feet of main lines.
- Televised 765,000 feet of main line.
- Walked over 10 million feet of line.
- Cleared 665,000 feet of right-of-way.
- Continued the Self Fleet Maintenance Program (in effect since 2004).
- Repaired 120 lines through 09/30/2009 (annual projection is 240).
- Repaired/Replaced 100 service lines through 06/30/2009 (annual projection is 200).
- Sealed 116 old service lines through 06/30/2009 (annual projection is 232).
- Adjusted 74 manholes through 06/30/2009 (annual projection is 148).
- Repaired/Constructed 292 manholes through 06/30/2009 (annual projection is 584).
- Rehabilitated 633 vertical feet of manholes.
- Completed 24 Capital Projects through 06/30/2009; \$991,218 in IWO spent through 06/30/2009 (annual projection is \$1,982,436).
- Replaced asphalt roller (Equipment # 0119).
- Replaced two trucks (Vehicle # 0642 and # 0643) with new Two-Ton Dump Trucks.
- Purchased two 6' x 8' trench boxes.
- Purchased one 8.5' diameter manhole box.
- Replaced a small track hoe (Equipment # 0685).
- Purchased one new equipment trailer.
- Reviewed the current Overflow Response Plan.
- Purchased one asphalt zipper.
- Purchased a Lathe and Milling machine (capital project) that is being utilized in the process of fabricating various equipment rebuild components.
- Completed a major Electrical and Controls project for the automation of the Fourche Aeration Service Gates.
- Completed a total rebuild of the Fourche Thickener No. 1.
- Continued a successful year of the in-house Pump Rebuild Program.
- Completed the Capital Project of extending the chlorinated water line into the final clarifier weirs at the Fourche Creek Wastewater Treatment Facility.
- Reworked all varec flame arresters on the digester domes.
- Installed emergency pump connections at three pump stations.
- Installed several emergency generator electrical transfer connections at pump stations.
- Purchased and outfitted a new pump station truck.
- Coordinated with the Operations department to facilitate the cleaning of three primary digesters and one secondary digester.
- A new 1.25 Megawatt methane-gas operated Engine/Generator set was installed in September 2009. This unit will serve as the primary source of electrical power for the plant, with any supplemental power needs being purchased from the electrical grid.

- Land application of over 5,000 dry tons of Class A – Biosolids was applied to area grass and farmlands during the latter part of summer.
- Anaerobic digester cleaning operations were completed on 5 of the 8 tanks, recovering up to 16% of each tank's volume due to accumulation of inorganic grit, rags, and other debris over the past 10 years.
- The 30 million gallon Peak Flow Attenuation Basin went on-line, which helped to mitigate excessive surcharged conditions along the Adams Field North and South Interceptors and transfer that flow to the Fourche Creek WWTP drainage basin for treatment.
- Construction is underway on the new Disinfection Facilities, which include a new chemical storage and monitoring building, conversion of an out-of-service tank to provide additional disinfection contact time, and redundant in-line monitoring to accurately track and adjust chemical feed rates to control budgetary costs.
- Automation of the Return Sludge System (RAS) which integrates automated logic into the operation and sequencing of the Return pumps. This allows for a constant ratio between plant influent and return flows to be maintained across a defined range, thus allowing for a more stable treatment environment for microorganisms.
- Completion of an in-depth analysis of the operational parameters of the Ultra-Violet Disinfection System. This study defined optimum operating ranges, identification and resolution of operational problems, and development of standard operating and maintenance procedures.
- Completion of the annual inspection and cleaning of all clarifier and activated basins. This includes the issuance of necessary work order in order to maintain a proactive maintenance approach.
- Completion of the Final Clarifier center feed pipe replacement project.
- Aging test equipment was replaced for metals analysis with a new model which increases test efficiencies through sample digestion and simultaneous analyses. Staff is currently working to complete method development.
- The laboratory's existing cyanide, phenols, and ammonia macro-distillation unit has been replaced with a micro-distillation unit. The micro-distillation units offer a smaller foot print, and increase testing efficiency through the use of less sample and chemical per test, and less time to process samples from start to finish.
- A Sprinter van has been ordered to replace an older vehicle. The Sprinter van has a diesel engine that gets an estimated 20-22 miles/gallon where the older vehicle has a gasoline engine that gets approximately 8 miles/gallon.

Organization Management

- Successfully administered on-line employee annual benefit enrollment.
- Maintained a 2.86% turnover rate while processing only seven personnel actions and a workforce of 244 employees.
- Operations staff members restructured their work schedule to reduce scheduled overtime, which resulted in a 7% reduction in salaries.

Financial

- Accounting implemented the fourth step out of a five-phase rate adjustment,

which was approved by the City of Little Rock Board of Directors on November 28, 2006. The rate increase consisted of 15% on January 1; 8% on July 1; 3% on January 1, 2008; and 4% on January 1, 2009. The last scheduled rate increase is 5% on January 1, 2010.

- Accounting implemented procedures to pursue federal and state grants and low-interest loans for capital projects, public awareness, and “green” infrastructure.
- One of the most significant cost-saving programs that has been very successful over the past 12 years for LRW has been our 100% Buy-Back Option for Rubber Tired Wheel Loader Backhoes. LRW purchased a total of 12 units at a cost of \$541,726; with the option of selling these units back one year later to the vendor at a total cost of \$503,653, for a net difference of \$38,073 or \$3,173 per unit. This is not only a good morale booster for the operator of the machine but it allows LRW the option to utilize the latest technology upgrades with minimal capital investment and operating costs. LRW is adding mini-excavators to this program for Calendar Year 2009.
- Partnering with the State of Arkansas, Finance has fully implemented a new purchasing program using purchasing cards (Visa credit cards). This system allows for LRW to procure items and reimburse merchant in a timely manner. This program has reduced administrative cost and provides enhanced information to management.
- Consolidated Fee Schedule invoices, administered by EAD, has provided over \$226,000 year to date for EAD permit, inspection, and discharge fees. EAD oversees an industrial extra strength surcharge program to recoup treatment costs. Total year projected surcharge revenue is over \$665,000 for 2009.

Regulatory

- Currently LRW operates two wastewater treatment facilities with daily monitoring requirements. In the fall of 2010, LRW will begin operating the new Little Maumelle Wastewater Treatment Facility which is a part of LRW's Consent Administrative Order obligations. LRW needs to explore ways to reduce costs to keep customer sewer rates as low as possible. LRW believes cost reductions can be achieved with a reduction in NPDES and pretreatment monitoring requirements at the existing treatment plants. To accomplish these cost saving measures, applications were submitted to ADEQ on August 11, 2009, to request reductions in monitoring frequencies at both the Adams Field and Fourche Creek wastewater treatment facilities.
- Trend charts for the percent Design Loading (monthly average) was developed for Adams Field and Fourche Creek Plant Influent.
- The LRW System Flow/Rainfall chart was updated to reflect flows from 1985-2008.
- A new micro method was implemented for Chemical Oxygen Demand to increase the overall efficiency of the test. This new method lessens employee exposure to hazardous chemicals, greatly decreases the hazardous waste produced, takes up less space in the laboratory, and uses less glassware and costly chemicals.
- The EAD Pretreatment Program conducts an average of 110 inspections per

month at industrial and commercial facilities to assure adherence to the LRW ordinances, and to provide protection of LRW's collection systems and treatment facilities. User compliance is documented in databases and enforcement actions have been administered when necessary to assist and oversee corrective actions implemented by such users.

- EAD provided documentation and a presentation to the Little Rock Sanitary Sewer Committee to successfully gain support for Show Case and Consent Order enforcement actions that provided an avenue for return to compliance for industries identified as delinquent to LRW ordinances. Presentation material was also provided to ADEQ upon request as assurance that LRW is fair and equitable to users.
- EAD provided guidance on LRW ordinances to a new food processing industry that is a major contributor to the Publicly Owned Treatment Works (POTW). This enabled LRW to assess projected loading rates and treatability. The industry provided pretreatment and flow measuring devices enabling the issuance of an Industrial Wastewater Discharge Permit.
- The City of Little Rock storm water ordinance required many cooling tower systems to connect to the sanitary sewer. EAD's evaluation of cooling tower discharges to the sanitary sewer was conducted to evaluate Molybdenum and Chromium tower treatment chemicals and contributions to the POTW headworks and biosolids. No concerns are noted from the study.
- After completing and passing the second quarter whole effluent toxicity testing at the Fourche Creek Wastewater Treatment Facility, a request to ADEQ was submitted and approved to reduce testing from once per quarter to semi-annually.
- Projected test totals performed by the Little Rock Wastewater Central Laboratory are 25,120 tests.
- Projected sampling totals at Adams Field and Fourche Creek wastewater treatment facilities are 6,498 samples.
- Projected sampling totals at Industrial and Commercial Users are 556 samples.

