

SIERRA CLUB SETTLEMENT
ANNUAL REPORT
FOR 2011

I. INTRODUCTION

Little Rock Wastewater (LRW) continued efforts to comply with the Sierra Club Settlement agreement dated September 12, 2001. By the end of 2011, the construction of the Little Maumelle Wastewater Treatment Facility (LMWTF) had been completed and was operational in the treatment of wastewater. The Treatment Facility along with contracts for the Access Road, Pumping Station and Conveyance Pipelines, totaling nearly \$80M, have been completed and added to the LRW system.

The Fourche Creek Wastewater Treatment Facility (FCWTF) Hydraulic Upgrade was divided into separate Contracts for ease of construction and financing. As of December 31, 2011, Schedule I (Disinfection Improvements) and Schedule II (Secondary Clarification) have been completed and placed into service. Schedule III (Head-works Improvements) is 100% complete with the design phase and is awaiting funds for construction.

These activities constituted LRW's major compliance efforts and they will be discussed with other activities in the order mentioned, consisting of (1) Projects Update; (2) Financing; (3) Other Compliance Actions; (4) Supplemental Environmental Projects; (5) 2011 Non-Capacity Related Sanitary Sewer Overflows; and, (6) 2011 Capacity Related Overflows.

II. PROJECTS UPDATE

A. Little Maumelle Wastewater Treatment Facility

The Little Maumelle Wastewater Treatment Facility project was divided into four contracts to facilitate design and construction. The project was separated as follows: Contract I is the access road to the plant site; Contract II is the treatment plant; Contract III is the reconfiguration of the Little Maumelle Pump Station which sends untreated wastewater to the treatment plant; and Contract IV is the conveyance contract which consist of the effluent, influent, sludge, and discharge lines which carry the various forms of wastewater to and from the treatment plant.

Contract I was completed prior to 2009. At yearend of 2011, construction of Contract II was substantially completed with punch list items being addressed. The plant was placed in service July 2011. Contract III was completed in October 2010, and Contract IV was completed March 2011.

B. Peak Flow Attenuation Facilities

In 2009, two of the four contracts for the overall project known as Peak Flow Attenuation Facilities were completed. Contract I (Diversion Structures and Gravity Line) was

completed in 2009. This project conveys wastewater from the gravity collection system to the Peak Flow Pump Station (Contract II).

For Contract II, final completion was issued in December 2009 for the 30 million gallon storage facility, the 12,500 linear feet force main from the pump station to the storage facility, and for the Peak Flow Pump Station. These facilities have been put into service.

The hydraulic upgrade of the Arch Street Pump Station is the third contract for the Peak Flow projects. This project was completed August 2011.

The 30-inch redundant force main project is the fourth contract under the Peak Flow projects. This force main project was further divided into three contracts to accommodate anticipated growth within the industrial park adjacent to wastewater facilities.

In the first contract, from the College Station Pump Station to the FCWTF, the contractor completed 17,660 linear feet of force main. Contract I was completed in August 2010.

For the second contract, which includes from the Arch Street Pump Station to the connection point on the east side of Pratt-Rommel Road, the contractor completed 24,000 linear feet of force main. The Final Completion Date was September 2010.

The third and final conveyance contract, was the completion of 500 linear feet of force main, which made the connection between Contract 1 & 2. The project was completed in January 2011.

C. Cantrell Road Pump Station Upgrade

Essentially all sanitary sewerage from the area north of Cantrell Road and east of Pinnacle Valley Road flow through the Rebsamen Interceptor. This interceptor and an area of the city bounded by the Dillard's corporate headquarters to Central High School, to the University of Arkansas Medical Center, back to the Dillard's headquarters - which includes the State Capital Grounds - flow through the Rose Creek sewer basin to the Cantrell Road Pump Station.

The Cantrell Road Pump Station was constructed in 1967 and was modified with bar screens and two dry pit submersible pumps in 1986. Two of the four pumps are original to the station while the other two pumps are replacement pumps that were installed in 1986. A portion of the switch gear is original while some was replaced or added in 1986. All mechanical and electrical components are fully depreciated and due to be replaced. To further ensure reliable service to this area, back-up power generation is scheduled for this project.

The five year forecast prepared in conjunction with the 2012 capital budget allocates project costs of \$426,497 in 2013 and \$7,524,231 in 2014 and 2015.

D. Cantrell Road Pump Station Force Main

The 30-inch force main that conveys flows from the Cantrell Road Pump Station to the River Front Interceptor is a prestressed concrete cylinder force main that was installed and placed in service in 1967 and has been in service since. Design life for similar structures can be 50 years. An engineering study of the force main needs to be performed to assess its existing condition. This project calls for the installation of a new force main and the inspection and rehabilitation of the existing force main after the new main is placed in service.

The five year forecast prepared in conjunction with the 2012 capital budget allocates project costs of \$175,745 in 2013 and \$2,985,361 in 2014 and 2015.

E. Fourche Creek Wastewater Treatment Facility Hydraulic Upgrade

The hydraulic upgrade of the Arch Street Pump Station from 38 million gallons per day (MGD) to 45 MGD will necessitate the hydraulic upgrade of the Fourche Creek Wastewater Treatment Plant to a minimum of 45 MGD. In 2008, LRW, with its consultant CDM, completed a 20-year capital improvement plan (CIP) to assess treatment processes, identify deficiencies, and plan for improvements to the plant to meet future hydraulic and process needs. The overall project was divided into four phases. Phase One is the addition of the new disinfection system, with a project cost of \$9,756,140.97. The disinfection project was completed January 2011. The second phase is the addition of a secondary clarifier, with a project cost of \$ 10,066,644.03, was completed October 2011. With the completion of the second phase, the treatment plant can hydraulically handle 45 MGD. The third phase will address headworks, bioreactor, and primary clarifier with a project cost estimate of \$ 13,322,092 to be completed in 2017.

After the completion of the Infiltration/Inflow analysis in 2010 and a determination is made that no additional overflow mitigation projects are required to eliminate sanitary sewer overflows, the fourth phase of improvements for FCWTF will be evaluated. The five-year forecast allocates \$ 20,890,953 for engineering, construction, administration expenses, contingencies, and plant process improvements. The project is scheduled to be completed in 2021.

F. Overflow Mitigation Projects

In the late 1980s, LRW was the first municipality in Arkansas to establish a program to address excessive infiltration and inflow (I/I) which leads to sanitary sewer overflows during or following wet weather events. Within the 1990s, LRW shifted its focus to not only address excessive I/I within public mains, but restore capacity to basin outfalls that were undersized for designated wet weather events and labeled this effort as the overflow mitigation program (OMP). The program has had an impact on the number of overflow points within the city as well as reduced the amount of extraneous rainwater that was treated. LRW will continue this program as evidenced by the following identified future projects and corresponding funding efforts:

1. *Jimmerson Creek (RLF #8)* – The Jimmerson Creek project only rehabbed the mains by CIPP or Pipe Burst method. The project was bid in early 2008. The contract was awarded to Building and Utility Contractors in the amount of \$2,986,650. The project was completed in 2009 in the amount of \$3,233,789.90. The manhole rehabilitation was completed in 2010. Post project performance indicates 3 overflows were eliminated.
2. *Allsopp South (RLF #8)* – The Allsopp South Project was awarded to Building and Utility Contractors in the fall of 2008. The contract amount is \$4,020,505.00. The contract was completed in 2010. The manhole rehabilitation was completed in 2011. The post project performance is currently under review.
3. *Barton (RLF #8)* - The project was bid on February 11, 2009. The contract was awarded to Building and Utility Contractors in the amount of \$1,770,641.36. The project was completed in 2010. The manhole rehabilitation was completed in 2011. The post project performance is currently under review.
4. *Allsopp North/Country Club (Future Funding)* – The Allsopp North/Country Club project is designed. The Allsopp North/Country Club project is the largest overflow mitigation project the utility has designed to date. The difficulty of this project is further multiplied by the housing density and extensive landscaping in the project area. The project is currently on hold due to a lack of funding.
5. *Allsopp Park Outfall (Future Funding)* - McClelland Engineers is under contract for the design of this outfall. The project is designed and easements are currently being procured. The project is on hold due to a lack of funding.
6. *Country Club Outfall (Future Funding)* - McClelland Engineers is under contract for the design of this outfall. LRW will construct a new outfall line along the creek from the intersection of Beechwood and Club to the cul-de-sac on Coffee Pot Lane. The site conditions and the area make this project difficult to construct. The project is on hold due to a lack of funding.
7. *Leawood, Echo Valley, and Pleasant Valley (Future Funding)* - The Leawood, Echo Valley, and Pleasant Valley projects are designed. The projects are on hold due to a lack of funding.
8. *Lower Swaggerty, Granite Mountain, Sub-basin 30100, and Jimmerson West (Future Funding)* - The Lower Swaggerty, Granite Mountain, Sub-basin 30100 (Bond Street), and Jimmerson West are designed or being reviewed for bidding. The projects are on hold due to a lack of funding.
9. *Jimmerson West Outfall (RLF #8)* – The project was bid on July 30, 2009 and subsequently awarded to Carson and Associates. The project was completed in 2010. The project eliminated 3 overflows.

10. *Jimmerson East and Upper Hinson Manhole Rehab (RLF #8)* – The manhole rehab project was bid on July 8, 2009. Corgill Construction was the low bidder and awarded the contract in the amount of \$562,294.00. The contract was completed in 2010.

11. *System Evaluation and Capacity Assurance Plan (SECAP) (RLF #8)* – LRW contracted with RJN Group to conduct the SECAP update. RJN started the project in the fall of 2009. RJN provided the final report in November 2010. The updated report lists multiple projects in addition to the original SECAP; the original SECAP was completed in 2002. The 2002 SECAP resulted in a Capital Improvement plan to eliminate overflows and bring the wastewater system into compliance with the Consent Administrative Order (CAO) by 2016 and Sierra Club Settlement Agreement by 2017. Many of the projects contained in the original SECAP have been implemented. RJN evaluated the impact of the completed projects and the need for the remaining improvements and/or develop additional alternatives. The objectives of the SECAP update are to flow monitor the entire sanitary sewer system, update the existing hydraulic model, identify capacity requirements, analyze existing pump stations, analyze equalization basins, analyze wastewater treatment plants, develop improvement projects, budget estimates, recommend infiltration/inflow reduction, and provide a capital improvement plan. RJN provided LRW with the data and analysis previously mentioned in the objectives.

LRW has listed the projects in the 2012 budget and scheduled the projects accordingly. The report lists storage facilities, operational adjustments, capacity improvements, and other pertinent items to eliminate overflows. The major projects for the storage facilities are at three sites within the collection system and one site at the Adams Field Wastewater Treatment Facility. The three sites are the Rock Creek Storage, Cantrell Road Storage, and the Mabelvale Pike Facility. The estimated storage for the three facilities is 62 million gallons. The AFWTF storage is estimated at 14 million gallons. The total amount of storage required is 76 million gallons. There are multiple projects listed in the SECAP update to increase the capacity of existing gravity mains. A large diameter main (42” & 48”) proposed from 36th street to Mabelvale Pike is the largest line project required. The Grassy Flat main is requiring a capacity increase from an 18” main to a 30” mainline. Multiple projects such as manhole adjustments and upsizing of mains is included in the report. The SECAP update assumed all previous collection system projects would be completed. The following list is currently included in the 2012 budget.

PROJECT DESCRIPTION		
District 84 OMP	Upper Coleman OMP	District 119 OMP
Leslie Circle Mainline	West Markham Mainline	Roselawn Cemetery Mainline
17 th Street Relay	Fairpark Relay	Bishop St. Relay
Victory Street Relay	Rodney Parham Relay	Markham to Rodney Parham Relay
3I078 to 3L080 42" to	Rebsamen Collector -	17 th Street Pipe Burst

60" - R3	Murray Park 10090	
Sherrill Heights 11000	3K059 - Diversion - R21	River Ridge P.S. 11200
Rebsamen Collector - Commercial 10050	Rebsamen Collector - Golf Course 10080	Boyle Park Mainline - R24
48" Cross Connection (16K) - R29	Rebsamen Collector - Alltel 10040	Longfellow SB-11400
Rose Creek East OMP	Rose Creek Central OMP	Rose Creek West OMP
Mabelvale OMP	Quapaw North OMP	Walnut Valley OMP
Overlook/Pinnacle Point OMP 10070	Rebsamen Collector - Harbor 10060	Barrow OMP
Foreman Lake OMP	Hall High South OMP	Springer Blvd. Relay - SECAP R1
University Avenue Relay - SECAP R7	Rose Creek East Relay - SECAP R13	Walton Heights - Basin 11600 OMP
Grassy Flat Main - R27	36 th Street to Mabelvale Pike Outfall	Mabelvale Pike (East of University) SB40701
Meadowcliff SB40702	Quapaw South SB20401	Mainline Improvements for Modeled Overflows
Chicot SB40704	Cloverdale SB40703	Upper Country Club Outfall - R19

III. FINANCING SEWER IMPROVEMENTS

A. Discussion:

There were no sewer revenue bond issues for 2011. For 2011, it was the intent of LRW staff to complete the existing projects related to the Consent Administrative Order (CAO). These projects include the LMWTF, the Peak Flow Attenuation Facilities, the Arch Street Pump Station improvements, the FCWTF Capacity Upgrade/Modifications, and collection system overflow mitigation projects.

A Sewer System Evaluation Study for future OMP projects using LRW construction crews and engineering staff was completed in 2011. In 2012, LRW will continue SSES work and the construction of smaller OMP projects using LRW crews. This will enable work to continue towards eliminating capacity overflows without requiring additional funding.

The proceeds of the Series 2009A Bond was utilized to fund the Arch Street Pump Station (ASPS) improvements and completed in 2011.

The proceeds of the Series 2008A and 2009B Bonds were utilized to complete the construction of the FCWTF Upgrade/Modifications, the LMWTF, and the Peak Flow Attenuation Facilities project. The proceeds of the Series 2008A Sewer Revenue Bond completed in 2011 and the Series 2009B Bond will complete in January 2012.

Financing for new projects is scheduled for the years 2012, 2013, 2015, and 2016.

IV. OTHER COMPLIANCE ACTIONS

A. Signage/Public Notification/Public Information:

As required in the Settlement Agreement, LRW staff developed a Sanitary Sewer Overflow Response Plan (SSORP) which was authorized by the Little Rock Sanitary Sewer Committee on September 18, 2002. The SSO Response Plan, as amended, is included in this document as Attachment A. The plan establishes a protocol for maintenance crews to follow when responding to an SSO event, and specifies internal and regulatory reporting procedures. The response protocol includes provisions for temporary signage and posting notices at individual residences. Temporary signage currently used by LRW is shown in Attachment B. A copy of the “door hanger” LRW uses to post residences is provided in Attachment C.

Practically all of the SSO Notification Program requirements contained in the Settlement Agreement are addressed in the SSORP, including the provisions for permanent signage at recurring SSO locations on public property. Locations eligible for permanent signage are in Table A-1 of the SSORP (Attachment A).

An example of permanent signage placed at recurring SSO sites is shown in Attachment D.

B. Public Relations Information

1. *Can the Grease*® - The *Can the Grease* initiative kicked off in 2002 as a means of education, motivation, and promotion of the grease related problems in Little Rock’s sanitary sewer system. LRW’s residential customers can request a grease information “starter kit,” which includes a grease container, six (6) heat-resistant liners, an informational pamphlet, and an informational magnet. Starter kits are also distributed in larger quantities at community events and to apartment complexes. In 2011, approximately **753** starter kits were delivered or mailed to residential customers, **612** to apartment complexes and mobile home parks, and approximately **420** at various community events or tradeshow. LRW distributed approximately **1,785** *Can the Grease* starter kits for the entire year.

The *Can the Grease* program was nationally recognized in 2008 with the *NACWA Public Information & Education Award*, and in 2009 with the *ADEQ Stewardship Award*.

2. *Captain Sewer*® - This program was not funded for 2011.

3. *Stay Connected*® - LRW continues to promote our **Stay Connected** program which has made a huge leap towards a cleaner, environmentally affable future through public education. The message is one of awareness and preservation: know where your sewer service line is and have it checked for cracks, breaks and debris. With an involved advertising campaign and service line inspection plan, LRW has made significant steps in public awareness and education of sewer service line

responsibility and maintenance. LRW strongly believes in educating and involving citizens in programs such as this one. For this reason, LRW is utilizing several methods of program advertisement and public education. Unlike several larger projects LRW is presently undertaking (e.g., new wastewater treatment facility), this program is not mandatory under the Consent Administrative Order (currently mandating projects for LRW), but rather it has become a passionate endeavor that LRW has taken on for the sake of public health and the environment.

The *Stay Connected* program was nationally recognized in 2010 with the *NACWA Public Information & Education Award*.

4. Bill Inserts - LRW created three (3) bill inserts that were distributed in the Utility bill in 2011. The “Educational” insert was released in February. It listed the population of Little Rock and the average amount of flow at two of LRW’s treatment facilities. The July “Rate Information” insert contained information on LRW’s need for a rate increase. The third and final bill insert was sent out in November. This insert directs our customers to the LRW website for information regarding our *Can the Grease* and *Stay Connected* programs.

5. Awards – LRW received several awards and recognition during 2011 for contributions to the environment, financial reporting, engineer of the year and public education. The awards LRW received are as follows:

(a) **NACWA Peak Performance Awards** – The National Association of Clean Water Agencies (NACWA) awarded LRW two Silver Peak Performance Awards for both treatment facilities, the FCWTF and AFWTF for 2010.

The Peak Performance Award has been bestowed upon wastewater agencies since 1986. It is given to facilities that consistently meet all National Pollutant Discharge Elimination System (NPDES) permit limits during the year. Between the FCWTF and AFWTF there are a combined 1,194 possible violation points. To be awarded the Silver Peak Performance Award means that an agency has had no more than 5 NPDES violations in a given year, which LRW achieved for 2010.

(b) **Certificate of Achievement for Excellence in Financial Reporting** – The Government Finance Officers Association (GFOA) has awarded the Finance Department of LRW the Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Report (CAFR).

The GFOA is a nonprofit professional association that serves approximately 17,500 professionals in the governmental finance field. The Certificate of Achievement for Excellence in Financial Reporting is the “highest form of recognition in governmental accounting and financial reporting” by the GFOA and is considered to be a “significant accomplishment by a government and its

management.” LRW’s CAFR was judged by an impartial panel that looked for high standards of the program such as “demonstrating a constructive ‘spirit of full disclosure’ to clearly communicate its financial story and motivate potential users and user groups to read the CAFR.”

This is LRW’s sixth consecutive year to accomplish this feat.

(c) **Distinguished Budget Presentation Award** - The Government Finance Officers Association (GFOA) of the United States and Canada awarded Little Rock Wastewater the GFOA'S Distinguished Budget Presentation Award for its budget for 2011. The award represents a significant achievement by the entity. It reflects the commitment of the governing body and staff to meeting the highest principles of governmental budgeting. In order to receive the budget award, the entity had to satisfy nationally recognized guidelines for effective budget presentation. These guidelines are designed to assess how well an entity's budget serves as:

- a policy document
- a financial plan
- an operations guide
- a communications device

Budget documents must be rated "proficient" in all four categories, and the fourteen mandatory criteria within those categories to receive the award.

When a Distinguished Budget Presentation Award is granted to an entity, a Certificate of Recognition for Budget Presentation is also presented to the individual or department designated as being primarily responsible for its having achieved the award. This award was presented to B. J. Harrison and Debbie Williams.

Award recipients have pioneered efforts to improve the quality of budgeting and provide an excellent example for other governments throughout North America. The Government Finance Officers Association is a nonprofit professional association serving over 17,600 government finance professionals throughout North America. The GFOA's Distinguished Budget Presentation Awards Program is the only national awards program in governmental budgeting.

(d) **Sterling Agency Award** – LRW was named a 2011 Universal Public Purchasing Certification Council (UPPCC) Sterling Agency for having a fully certified staff for three (4) consecutive years.

This award was created to acknowledge an agency’s commitment to the value of certification in the public sector. Norma Hall, Chair of the UPPCC Governing Board states that “this achievement speaks volumes of [this] agency’s commitment and dedication to the profession and the skills and expertise that [LRW] bring to the public procurement industry.”

LRW is currently the only public organization to have a fully certified purchasing staff in the state. LRW set the bar three (4) years ago by becoming the only public entity in Arkansas to have a 100% certified staff and has now raised the bar by being named a Sterling Agency for its devotion and commitment to public procurement. Trudy Noble accepted this award.

(e) **Engineer of the Year Award** – LRW’s Engineering Supervisor, Cyrus Oren Noble III, was chosen as the Engineer of the Year by the Arkansas Society of Professional Engineers (ASPE) Central Arkansas Chapter on February 23, 2011. He then traveled to Northwest Arkansas where he won the ASPE State Chapter Engineer of the Year award on April 8, 2011, beating out contestants from the other two chapters, Hot Springs and North West Arkansas. He is now eligible to compete on the national level through the National Society of Professional Engineers (NSPE).

The ASPE is a state society of the NSPE. NSPE is the only engineering society that represents individual engineering professionals and licensed engineers (PEs) across all disciplines.

Founded in 1934, NSPE strengthens the engineering profession by promoting engineering licensure and ethics, advocating and protecting PEs' legal rights at the national and state levels, publishing news of the profession, providing continuing education opportunities, and much more.

6. Trade Associations, Exhibits, Fundraisers, and Community Service – One of the major success elements of our public awareness program in 2011 was our participation in specific trade associations, environmental exhibits, and community events. Participation in selected trade associations has allowed LRW to promote and educate an extensive number of residents and business owners on the importance of reducing grease in the sanitary sewer system, updates on our major projects and water conservation. 2011 event/exhibit participation are as follows:

(a) **Little Rock Central High School Science Fair 2011** - Since 1995, LRW has sponsored the Little Rock Central High (LRCH) School Science Fair by providing materials for protection of the gymnasium floor, the incentive awards, and judges. Central High teachers, PTA, and administration have been most appreciative of LRW's efforts in supporting environmental education and LRW employees have been very responsive in volunteering. On February 10, 2011, the LRCH science fair was conducted and several LRW employees volunteered to judge.

(b) **Neighborhoods USA Projects** –On Nov. 8th LRW employee’s participated in the 5K Race and also volunteered for event staff for the 5K Race to Indianapolis at Hindman Park.

The organizational mission of NUSA has, since its inception, been to build and strengthen neighborhood associations and to promote productive communications and collaborations between those associations and both the public and private sectors. The organization has, for over thirty years, served these broad objectives in part through the conduct of an annual conference. This provides an opportunity for people from all locations, sectors and levels of society to discuss the pressing issues of the times, share experiences and offer encouragement or assistance.

(c) **National Night Out** – LRW participated in two National Night events in 2011. On Oct. 4th, LRW employee's participated in Jazz on the Boulevard, and Upper Baseline where they volunteered at the events and promoted our CTG program.

(d) **Good Shepherd Ecumenical Retirement Center Health Expo** – The Good Shepherd Retirement Center hosted a Health Expo on May 25, 2011. LRW attended with Captain Sewer who danced to live music with the center's patrons and passed out *Can the Grease* kits.

(e) **GIS Day** - *The GIS Day event, held at Verizon Arena on November 16, 2011, focused on GIS data technology as strategic resources for economic development.* "Discovering the World Through GIS" was the theme for PAgis' GIS Day event at the Verizon Arena in North Little Rock. Presenters focused on how GIS is used to manage and maintain community resources.

Another way LRW promoted public awareness programs in 2011 was our participation in the United Way fundraiser campaign, Habitat for Humanity, Little Rock's Adopt-A-Street program where LRW adopted ¼ of a mile of road along Shackelford Road, and the Channel 11 THV Summer Cereal Drive for the Arkansas Foodbank Network.

(f) **Reforestation Project with Arkansas State Parks** – LRW participated in re-planting 1,200 trees at Pinnacle Mountain State Park Feb. 18th of 2011. LRW employee's along with State Park and CDM Engineering employee's planted trees in the temporary construction easement on park land near Pinnacle Mountain.

7. Media – It has been the intent of LRW to continue improved communication with all areas of the media during 2011, but with a smaller budget. That goal was accomplished through regularly issued press releases highlighting special topics of interest. LRW worked closely with the local newspaper to offer information in a timely manner. That effort was found to be positive in the result of most newspaper articles being factual.

Due to 2011 budget restrictions, our ability to place ads in popular publications was limited. LRW advertised in various local publications such as *Arkansas Times*,

Arkansas Democrat-Gazette, Arkansas Business, Little Rock Family, Green Guide, Little Rock Regional Business Guide.

In an effort to obtain additional media attention, both earned and bought, for *Can the Grease*, a 30-second commercial was aired on the Comcast Cable Network. The commercial featured Captain Sewer offering a family a *Can the Grease* kit as a solution to not pouring grease down the drain.

8. Publications – LRW’s priority is to keep the public informed as much as possible. One of the many ways we accomplish this is through the information we provide through printed publications. We create, print and distribute quarterly major projects updates called, “The Current Report.” These booklets go to local officials, community stakeholders, neighborhood associations, and employees. We also print several informational brochures on a variety of topics from our *Can the Grease* and *Stay Connected* programs to our treatment facilities and construction. Due to budget restrictions and cuts, publications for 2011 were extremely limited.

9. Website – LRW continues to maintain the site with the latest news, updates, and information for those who access the site. The user-friendly site allows visitors to view a calendar listing all Sanitary Sewer Committee meeting dates, approved minutes of the Committee, and even biographies of each Committee member. With several interactive displays, general wastewater information, ordinances, rate information, and much more, website traffic continues to grow. One of the most visited areas of the site is the customer information section, which allows visitors to select a topic or department, and then populate a field with a question or comment. They can also look at LRW’s construction schedule to see dates and places of work to be performed.

Under *Community Services*, information is available about the following: Who to Call, Frequently Asked Questions, Residential Services, Commercial Services, LRW Ordinances, Sewer Line Locator, and Information Request Form. Under *Community Awareness*, information is available about the following: Work In Your Neighborhood, Where Does Your Money Go?, LRW Programs, Headlines & Newsroom, Operational Events, Calendar of Events, and Information Request Form. Under *Education*, information is available about the following: Conservation & Environment, Treatment Technology, Innovation in Wastewater, Water Reuse, Pollution Prevention, and Information Request Form. Under *About LRW*, information is available about the following: LRW Business Center, LRW Overview, Sanitary Sewer Committee, Our People, Financials, Capital Improvements, Facilities & Locations, Awards & Recognition, and Information Request Form.

10. Facility Tours – LRW continued to advertise wastewater treatment facility tours at our Little Maumelle Treatment Facility and on the LRW website and in *Little Rock Family*. To further public education, brochures are distributed to each visitor detailing the facility during the tour(s). Some of those who toured the facility were: The Episcopal Collegiate School, AWW&WEA Central District, and the LRW Leadership Solutions Class. In addition, a special tour was given to attendee’s of the LMTF Dedication Ceremony, November 10th.

11. *Little Maumelle Treatment Facility Dedication* – LRW proudly dedicated our new treatment facility on November 10, 2011. The Little Maumelle Treatment Facility is the culmination of many years of planning which began with a study conducted in 1969 that determined the need for an additional wastewater treatment plant to support the greater Little Rock area. In 1976, Little Rock Wastewater purchased land on Beck Road, which was then sold in 1979 due to a vote to change the location. To address immediate needs, the Little Maumelle Pump Station was completed in 1987, and in the mid-90s a system evaluation revealed the need for a treatment plant to serve the Little Maumelle area. This evaluation was presented to the Little Rock City Board, and after reviewing 13 different sites, LRW purchased a 21-acre tract near Pinnacle Mountain in 2005.

The Little Maumelle Treatment Facility is capable of handling 4 million gallons of waste daily. This new facility features up-to-date technology, which includes a tertiary treatment process, aesthetic design, reduced size, and odor and noise control. Similar to the Fourche Creek Treatment Facility, the step feed process will be utilized at this new facility as well. By combining the latest technology along with a proven, successful process, the Little Maumelle Treatment Facility will fulfill the current and future needs of the community.

V. SUPPLEMENTAL ENVIRONMENTAL PROJECTS AND ANY OTHER LRW ENVIRONMENTAL EFFORTS

The Settlement Agreement required the LRSSC to establish a Supplemental Environmental Project consisting of the Fourche Plant Wetlands, bike paths (set forth hereinafter in paragraphs A and B):

- A. Fourche Creek Wastewater Treatment Facility Wetlands:** The 90 acres of wetlands next to the FCWTF have not been disturbed and are available to Little Rock Parks & Recreation Department if it wishes to develop hiking trails on the property. In 2010, the Audubon Society of Arkansas removed the invasive species, Alligator Weed, from this area by laying down tarps to “choke out” the weed. They followed up by replanting species of vegetation native to the area. The Audubon Society also introduced to the area an insect known for only eating the Alligator Weed. They obtained these insects from the Corps of Engineers out of Jacksonville, Florida. The replanting of the native vegetation has been successful but the Audubon Society is still testing the success of the insects.

- B. Bike Paths:** LRW contractors recently completed a pipeline conveyance project in correlation with the LMWTF where it placed large diameter pipes underneath Pinnacle Valley Road (PVR) and County Farm Road (CFR). The completion of the project entailed a new, asphalt road for PVR and CFR with designated bike paths on both sides of the road. LRW also constructed a walking bridge on top of our conveyance pipe which crosses the Little Maumelle River. When LRW constructed the access road to the LMWTF, it constructed the road wide enough to make room for future bike path endeavors along the road. LRW is continuing communication with Little Rock’s Parks and Recreation Department, the City of Little Rock and

Pulaski County officials for future possible bike paths. Mayor Mark Stodola invited LRW to be a part of a bike path task force, which it plans on actively participating in the future.

VI. 2011 NON-CAPACITY RELATED SANITARY SEWER OVERFLOWS

- A. Compliance Standard:** The Settlement Agreement limits the number of non-capacity related SSOs based on 100 miles of sanitary sewer operated and maintained by LRW in LRSSC’s collection and treatment system. The Settlement Agreement specifies the following “interim schedule” for non-capacity related SSOs:

Calendar Year	Number of Non-Capacity Related SSOs per 100 Miles of Sewer
2002	12
2003	11
2004	10
2005	9
2006	8
2007	7
2008	6

For the calendar year 2002, the Settlement Agreement established the mileage of sewers at 1100 miles; actual mileage according to LRW’s GIS system as of December 31, 2011 is 1,346 miles. The 2011 mileage data establishes a benchmark of 1,346 miles of sewers. Therefore, the 2011 performance requirement for LRW was to limit non-capacity related SSOs to no more than 81 SSOs, according to the interim schedule.

- B. Non-Capacity Related SSOs in 2011:** There were 48 non-capacity related SSOs reported in 2011. Of the 48 total, two (2) SSOs were related to construction, and one (1) SSO was related to vandalism. The result was a total of 45 non-capacity related overflows attributed to the operation and maintenance of the LRW collection system. Of the 45 non-capacity related overflows, three (3) SSOs were attributed to debris; seven (7) SSOs were attributed to equipment failure; twelve (12) SSOs were attributed to grease; twelve (12) SSOs were attributed to line failures; eleven (11) SSOs were attributed to roots.* A complete listing of non-capacity related SSOs is provided under Attachment F.
- C. Compliance Assessment:** Using 1,346 miles of maintained sewers and the “interim schedule” provided in the Settlement Agreement, LRW complied with its 2011 performance requirement to have no more than 81 non-capacity related SSOs, with 45 non-capacity related overflows attributed to the operation and maintenance of the collection system owned and operated by Little Rock Wastewater Utility.

* In March 2007, LRW eliminated the combination of “Roots & Grease” as a code in reporting the cause of an overflow. LRW decided to use either “Roots” or “Grease” to improve reporting and tracking of SSOs.

D. Additional Projects Not Covered By SECAP: In addition to the progress made on SECAP projects during 2011, LRW spent approximately \$2,300,000.00 renewing or replacing structurally deteriorated sewer mains. Old deteriorated sewers are sources of infiltration/inflow and are prone to blockage, contributing to both the number of capacity and non-capacity SSOs.

LRW has reduced the number of non-capacity related sanitary sewer overflows attributed to the operation and maintenance of the collection system owned by CLR to below 6 per 100 miles of sewer lines for eight (8) consecutive calendar years, being 2004, with a total of 42, 2005, with a total of 53, 2006 with a total of 42, 2007 with a total of 46, 2008 with a total of 33, 2009 with a total of 38, 2010 with a total of 39 and 2011 with a total of 45. Therefore, under the Settlement terms in Paragraph No. 5, page 10, LRW is deemed to have complied with all provisions of this Settlement related to non-capacity related SSOs.

In a continued effort to maximize LRW's rehab dollars, LRW treated 37,801 feet of mainline in 2011 with a contracted chemical root removal company with a total cost of \$54,042. Root removal is an important component of LRW's Plan 66 that targets SSO reduction.

LRW personnel completed work on 175 line segments that were in need of point repairs as well as relocated or replaced 12,866 feet of sewer line.

1569 feet of sewer line was rehabilitated under maintenance contracts for pipe bursting and cured-in-place-pipe (CIPP).

In 2011, the Cleaning and Inspection Department Televised 464,778 feet, Hand Cleaned 790,240 feet, Hydro Cleaned 2,521,567 feet, and Line Walked 6,225,139 feet of sewer lines.

VII. 2011 CAPACITY RELATED SANITARY SEWER OVERFLOWS

A. Compliance Standard: The 2001 Settlement Agreement required that capacity related SSOs be eliminated prior to the 2017 deadline as set forth in the 2002 SECAP. Through an Order of the United States District Court, a Motion for an extension of time to complete the obligations under the settlement agreement was granted. The obligations under the 2001 Settlement Agreement was extended through December 31, 2018 (Attachment H). The Settlement Agreement provides that SSOs may occur without a breach of the Settlement Agreement if rainfall amounts exceed a duration-quantity table that essentially defines a two-year storm event ("qualifying event"). A qualifying event shall occur if any of the twelve permanent rain gauges within the collection system record a two-year storm event. More specific, to that end, the agreement required completion of a study recommending and establishing a time line for specific actions to address capacity related SSOs. The study would serve as the foundation for a long-term compliance program.

- B. **Capacity Related SSOs in 2011:** There were 326 capacity related SSOs reported in 2011 at 123 locations, shown on Attachment G. There were five (5) rain events recorded in 2011 measuring above the Design Storm which resulted in 247 capacity related overflows. The remaining 79 capacity related overflows occurring in 2011, resulted from rain events measuring below the Design Storm threshold.

VIII. CONCLUSION

LRW realized continued success in controlling non-capacity related overflows throughout the year of 2011. The established maintenance procedures and schedules continued to provide the desired results by minimizing mainline stoppages within the collection system. In addition, the \$2 million dollars of capital invested through the replacement of the aging collection system continued to reduce stoppages related to structural pipe failures. The year of 2011 was clearly a year for seeing some of our major capital projects come to fruition. The new Little Maumelle Wastewater Treatment Facility was the single largest capital investment project in the history of Little Rock Wastewater. The completion of construction for the Arch Street Pump Station Upgrade, the Redundant 30" Fourche Creek Force Main and the improvements to the Fourche Creek Wastewater Treatment Facility were also monumental in our continued effort to eliminate overflows. Looking forward to 2012, LRW intends to focus our capital dollars towards collection system improvements. LRW staff have completed the design for over \$20,000,000 of collection system improvement projects and continue to work through the projects listed in the 2010 System Evaluation and Capacity Assurance Plan Update.