

**2015 | CONSENT
ANNUAL | ADMINISTRATIVE
REPORT | ORDER**

**February 26, 2016
IN ACCORDANCE WITH
LIS NO. 06-037
DATED MARCH 9, 2006**



VIA HAND DELIVERY

February 26, 2015

Mr. Caleb Osborne
Associate Director - Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
Little Rock, AR 72218-5317

Re: 2015 Annual Report on the
Collection System Management Program (CSMP)
Little Rock Wastewater
Little Rock, Arkansas
Arkansas Department of Environmental Quality
Consent Administrative Order LIS No. 06-037

This is to acknowledge receipt of the above captioned report on
February 26, 2016.

RECEIVED

FEB 26 2016

Anton Pater

ADEQ Representative



VIA HAND DELIVERY

February 26, 2015

Mr. Caleb Osborne
Associate Director - Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
Little Rock, AR 72218-5317

Re: 2015 Annual Report on the
Collection System Management Program (CSMP)
Little Rock Wastewater
Little Rock, Arkansas
Arkansas Department of Environmental Quality
Consent Administrative Order LIS No. 06-037

Dear Mr. Osborne:

Little Rock Wastewater is pleased to submit one original with a copy on CD format of the referenced 2015 Annual Report on the implementation and effectiveness of the Collection System Management Program in compliance with the Arkansas Department of Environmental Quality Consent Administrative Order LIS No. 06-037 ("CAO") as referred to on Page 7, Paragraph V of the CAO.

Should you have any questions regarding this submittal, please contact me at 501-688-1416 or e-mail at john.holloway@lrwu.com.

Sincerely,

LITTLE ROCK WASTEWATER

A handwritten signature in black ink that reads "John Holloway".

John Holloway, P.E.
Director of Engineering Services

Letter to ADEQ
Re: 2015 Annual CSMP Report
February 26, 2015
Page 2

Attachment

***NOTE:** The 2015 Annual Report will be available at the following link <http://www.lrwu.com/capitalprojects> for the individuals listed below. If you have any problems accessing this information, please do not hesitate to contact me.

cc: Little Rock Water Reclamation Commission
Greg Ramon, CEO
John Jarratt, Chief Administration Officer
Howell Anderson, P.E., Chief Operating Officer
Little Rock Wastewater Directors
Mayor Mark Stodola
City Manager Bruce Moore
City Attorney Tom Carpenter

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
CONSENT ADMINISTRATIVE ORDER
ANNUAL REPORT
FOR 2015

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ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
CONSENT ADMINISTRATIVE ORDER
ANNUAL REPORT
FOR 2015

I. INTRODUCTION

By letter dated March 20, 2006, the Arkansas Department of Environmental Quality ("ADEQ") sent Little Rock Wastewater ("LRW") the ADEQ Consent Administrative Order ("CAO") dated March 9, 2006, with Attachments "A" and "B." ADEQ specified the annual reporting date for the implementation and effectiveness of the Collection System Management Program ("CSMP") on or before February 28 each year in which the CAO remains effective. This report is submitted in compliance with this requirement.

II. IMPLEMENTATION AND EFFECTIVENESS OF THE COLLECTION SYSTEM MANAGEMENT PLAN ("CSMP")

In 2012 and 2015, the Little Rock Board of Directors granted LRW rate adjustments that will support funding of a portion of the projects needed to comply with the CAO. The 2012 rate adjustment will support the study, design, and construction of projects into 2017. The 2015 rate adjustment will support the study, design, and construction of projects through 2021.

In 2015, LRW continued its efforts by engaging with consultants for the study and design of major capital improvement projects outlined in the 2010 SECAP Update. Specifically, LRW continued capacity-related facility projects by working with consultants to complete the construction documents for the Scott Hamilton Drive Peak Flow Facility (formerly known as the Mabelvale Pike Peak Flow Attenuation Facility) and completed construction of the Cantrell Road Pump Station and Force Main Projects. On April 15, 2015, ADEQ granted LRW an extension of the CAO deadline to December 31, 2023. The extension allows for time to reduce sources of infiltration and inflow (I/I) in the areas that contribute to the Rock Creek and Cantrell Storage Projects thereby eliminating the need for in-system storage in those areas. On the collection system side, LRW initiated and completed the construction of projects in the Allsopp/Country Club area, Leawood, and Lower Swaggerty. Also during 2015, LRW continued its service line replacement program targeted at maintaining reliable sewer service to the ratepayers and will also provide the benefit of reducing private sources of inflow which contribute to the cause of capacity related overflows.

All major compliance efforts will be discussed with other activities in the order mentioned, consisting of (III) Projects Update;(IV) Other Compliance Actions; (V) 2015 Non-Capacity Related Sanitary Sewer Overflows; and, (VI) 2015 Capacity Related Overflows and (VII) Project Schedule Update.

III. PROJECTS UPDATE

The System Evaluation Capacity Assurance Plan (SECAP) Update is the capital improvement plan (CIP) to mitigate overflows for the designated design storm.

LRW has listed the (CIP) projects in the 2016 budget and scheduled the projects accordingly. The report lists storage facilities, operation adjustments, capacity improvements, and other pertinent items to mitigate overflows. There will be one storage site project, Scott Hamilton Drive Peak Flow Facility (formerly referred to as the Mabelvale Pike Peak Flow Attenuation Facility), adding 31 million gallons of storage capacity to the existing facility. On December 1, 2015, LRW was granted a discharge permit modification allowing parallel treatment to the existing biological train. The new plant configuration will allow for 94 million gallons per day

of continuous treatment while meeting discharge permit parameters. The new approach will eliminate the need for additional storage at the Adams Field Wastewater Treatment Facility. 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 inch main to a 30 inch 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 projects already completed or currently included in the 2016 budget.

A. Little Maumelle Wastewater Treatment Facility

Construction of the project was completed in March 2011 and the facility was placed in operation in July 2011.

B. Peak Flow Attenuation Facilities

Construction of the projects was completed in August 2011.

C. Cantrell Road Pump Station and Force Main Upgrade

Construction of the projects was completed in November 2015.

D. Scott Hamilton Drive Peak Flow Facility (formerly referred to as Mabelvale Pike Peak Flow Attenuation Facility)

The SECAP Update, dated November 2010, identified the need for additional storage to complement the existing storage facility at Scott Hamilton Road. The additional storage, along with a hydraulic upgrade at the Peak Flow Pump Station, will further reduce the surcharge of rainfall dependent inflow and infiltration within the North and South 60 Sewer Interceptors thereby mitigating sanitary sewer overflows within the service area for the identified design storm. LRW progressed towards completion of the design phase efforts for this project. The preliminary engineering report identified the need for an additional 31 MG of storage. The Conditional Use Permit phase is completed. The project will be out for bid in mid-year 2016.

The five year forecast prepared in conjunction with the 2016 capital budget allocates project cost of \$9,242,659 in 2016, \$10,186,496 in 2017, and \$3,122,415 in 2018.

E. Peak Flow Pump Station – Additional Pump

The Peak Flow Pump Station was designed with a vacant pump position so the capacity of the station could be readily increased when storage becomes available. The increased capacity of the station will reduce the occurrence of sanitary sewer overflows for the design storm event with additional 31 MG storage at the Scott Hamilton Peak Flow Facility. The additional pump is scheduled to be installed in 2017 with a project cost of \$1,135,426.

F. Fourche Creek Wastewater Treatment Facility Hydraulic Upgrade

The hydraulic upgrade of the Arch Street Pump Station from 36 million gallons per day (MGD) to 45 MGD necessitated the hydraulic upgrade of the Fourche Creek Wastewater Treatment Facility 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 was 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 was 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 \$26,250 to be completed in 2016, \$5,384,611 in 2017, and \$5,661,945 in 2018. Phase Four of FCWTF does not include any improvements pertaining to the SECAP. The five-year forecast allocates \$11,072,806 for engineering, construction, administration expenses, contingencies, and plant process improvements. This project is scheduled to be completed in 2018.

G. Adams Field WWTF Nutrient Removal

In 2015, the Arkansas Department of Environmental Quality (ADEQ) determined that the oxygen demanding constituent of all municipal wastewater discharges, ammonia nitrogen (NH₃-N), has a significant effect on the predicted dissolved oxygen (DO) level in the Arkansas River. The ADEQ water quality model indicated that a NH₃-N permit limit of 7.0 mg/l for the Adams Field facility will be needed to meet the in-stream DO water quality standard of 5.0 mg/l.

In a letter dated May 21, 2015, ADEQ notified LRW that the next renewal permit will include new limits for NH₃-N and directed LRW to begin working toward compliance in the next permit. The letter went on to say that LRW's failure to meet future permit limits could result in a significant noncompliance issue the will make this issue more difficult and costly to remove.

In order to achieve compliance, ADEQ has directed LRW to submit two progress reports identifying steps taken toward evaluating and selecting operational changes and/or treatment options. By February 1, 2016, Progress Report no. 1 will indicate LRW ability to comply with future NH₃-N limits on a consistent basis with its current treatment system configuration. By February 1, 2017, Progress Report no. 2 shall evaluate changes in operational and/or treatment options. The forecast prepared within the 2016 capital budget allocates project cost of \$115,000 in 2016 and \$58,975,000 between 2017 and 2021 and \$7,240,000 between 2022 and 2025.

H. Adams Field Parallel Treatment--(previously Storage/Disinfection)

The SECAP Update, dated November 2010, identified the need for additional storage at the Adams Field Treatment Plant to complement existing and proposed storage facilities (Scott Hamilton Drive Peak Flow Facility). The additional storage will allow for extended hydraulic pass-through of rainfall dependent infiltration and inflow volume thereby mitigating sanitary sewer overflows within the service area for the identified design storm. However, the amount of storage prescribed in the SECAP Update limits the wet weather capacity of the plant to the duration of the design storm. Also, elevated flow rates through the biological portion of the plant hinders the ability of the plant to remove NH₃-N. Within the next permit cycle, ADEQ will require more stringent limits on the amount of NH₃-N within the effluent.

In 2014 LRW applied for and was granted in late 2015 a permit modification that will allow for parallel treatment of the biological system. A parallel treatment system used during wet weather events will take peak flows from the biological treatment train allowing it to run steady state and thereby remove NH₃-N to within permit limits. Also, parallel treatment will prove effective in adequately treating effluent to within permit limits during wet weather events. The advantage of a parallel treatment system over

storage is that the plant can maintain its peak capacity for a much longer duration than the design storm thereby reducing the amount of spillage within the collection system. With this permit modification, LRW has abandoned the concept of additional storage at the plant and will proceed with parallel treatment in 2016.

The forecast prepared within the 2016 capital budget allocates project cost of \$30,975,485 between 2016 and 2023.

I. Fourche Creek WWTF Nutrient Removal

Effective October 1, 2015, the Arkansas Department of Environmental Quality (ADEQ) issued a permit renewal for the facility. Within the permit, ADEQ directed LRW to comply with a schedule for ammonia based limits based on those issues outlined under the narrative for Adams Field Treatment Facility - Nutrient Removal. At 18-months after the effective date of the renewed permit, Report No. 1 will contain an evaluation of the ability of the current treatment system, as configured, to comply with the final ammonia nitrogen (NH₃-N) or Whole Effluent Toxicity (WET) limits on a consistent basis. If the evaluation proves limits can be achieved consistently, then one additional report (no. 3 due 34 months after the effective date) will be presented indicating a final NH₃-N limit or WET limit will be reported. Should Report No. 1 conclude that the final limits for NH₃-N or WET cannot be achieved on a consistent basis, then a report (no. 2 due 24 months after effective date) shall evaluate and select operational changes and/or other treatment configurations to achieve compliance. The final report (no. 4 due 36 months after effective date) shall certify that treatment system operational changes, if any, were completed and are expected to comply with the final limits on a consistent basis. The forecast prepared within the 2016 capital budget allocates project cost of \$100,000 in 2016 and \$1,480,000 between 2017 and 2025.

J. Jamison Pump Station Upgrade

The Jamison Road Pump Station was constructed in 1993. The station consists of five submersible pumps which include two 25 HP and three 150 HP pumps. There are two grinders and screens – one on each of the inlet channels. Dry weather flow at the station is approximately 2 MGD. Peak pumping capacity is approximately 16 MGD. Overall the wet well, valve vault, and building structure are in good condition and the station is functioning as designed. No changes are immediately required, but the SECAP recommended installing back-up power, painting the ferrous surfaces at the station, and replacing the grinders with a mechanical bar screen when maintenance of the grinders becomes an issue. The forecast prepared within the 2016 capital budget allocates project cost of \$621,983 in 2017 and \$1,585,376 in 2018. The project is scheduled to start in 2017 and be completed in 2018.

K. 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. During the 1990s, LRW shifted its focus not only to address excessive I/I within public mains, but to 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 reduced 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. Overflow Mitigation Projects (OMPs) funded by RLF XI:

- a. **Allsopp North/Country Club Rehabilitation** **\$8,867,300**
The Allsopp North/Country Club mainline CIPP rehabilitation project was completed. The second phase of rehabilitation, Pipe Burst and Open Cut Construction, was completed in November 2015. The Allsopp North/Country Club project is the largest overflow mitigation project the utility has designed to date.
- b. **Allsopp Park/Country Club Outfall** **\$4,869,945**
These two outfall projects traverse some rather difficult terrain within the city's riverfront region and required careful attention to their environmental surroundings. Both outfall replacement projects were designed by McClelland Consulting Engineers (MCE) and MCE performed construction administration. The construction efforts were completed in February 2015.
- c. **Leawood OMP** **\$6,829,800**
The CIPP portion of this Overflow Mitigation Project has been completed. The second phase of rehabilitation, containing Pipe Burst and Open Cut Construction will begin in February 2016.
- d. **Lower Swaggerty OMP** **\$6,075,900**
The CIPP portion of this Overflow Mitigation Project has been completed. The second phase of rehabilitation, containing Pipe Burst and Open Cut Construction has been awarded and construction is underway. The project is scheduled to be completed in October 2016.
- e. **Pleasant Valley OMP** **\$2,723,073**
The CIPP portion of this Overflow Mitigation Project was combined with the rehabilitation, containing Pipe Burst and Open Cut Construction. This project was completed in October 2015.
- f. **Echo Valley OMP** **\$3,501,354**
The CIPP portion of this Overflow Mitigation Project was combined with the rehabilitation, containing Pipe Burst and Open Cut Construction. This project was begun in September 2014. Construction has been completed with final close-out of the contract in February 2016. A section of the outfall was pulled from the original contract, due a major conflict with 48" waterline, redesigned and bid separately. This work has been bid and is anticipated to be completed by the summer of 2016.
- g. **0H – 0G Relocation** **\$580,800**
The 36" outfall serving the Baptist Hospital, the Natural Resources Complex, as well as West Financial District, was previously under design for relocation. The proposed relocation was disapproved by the Federal Highway Administration, due to being in essence a longitudinal utility installation inside the right-of-way of an Interstate Highway. Therefore, it was determined necessary to stabilize the existing 36" pipe in place as well as internally rehab the pipe, in order to help ensure the long-term integrity of this vital interceptor. The external stabilization phase was completed in November, 2014. Bids for the Internal Rehabilitation phase were opened on September 4, 2015. The work on the Internal Rehabilitation phase will be complete in February, 2016.
- h. **42" Force Main Inspection & Diversion Structure – R29** **\$2,942,318**
Since its installation in the early 1980's, the force main serving the Fourche Creek Facility has undergone five major repairs due to hydrogen-sulfide degradation. This investigation will afford an internal review and structural determination of the remaining pipe. The unique situation of investigating while surcharged with raw wastewater creates a challenge that until only recently has technology been available to "see" through this medium and

evaluate the surrounding pipe material. A technology using the SmartBall was completed in the summer of 2014. No leaks were detected, but the ARVs on the force main will need to be upsized and access points will be installed at the locations. During the installation of the access points, further investigation will be performed internally on the force main. A diversion structure to allow flows to be transferred from the 30" Fourche Force Main to the Adams 60" during high flows is being installed near Springer Boulevard which will address the R29 project. The construction on this project began January 2016.

- i. Allsopp North/Country Club Manhole Rehab** **\$431,900**
This manhole rehab project will help to address Infiltration and Inflow, as well as repair any structural deterioration within the Allsopp North/Country Club basins. Construction on this project will begin in 2016.
- j. Leawood Manhole Rehab** **\$525,036**
This manhole rehab project will help to address Infiltration and Inflow, as well as repair any structural deterioration within the Leawood area. Construction on this project will begin in 2016.
- k. Echo Valley Manhole Rehab** **\$283,446**
This manhole rehab project will help to address Infiltration and Inflow, as well as repair any structural deterioration within the Echo Valley area. Construction on this project will begin in 2016.
- l. Pleasant Valley Manhole Rehab** **\$431,400**
This manhole rehab project will help to address Infiltration and Inflow, as well as repair any structural deterioration within the Pleasant Valley area. Construction on this project will begin in 2016.
- m. Springer Blvd – R1** **\$1,159,089**
This project consists of the upsizing of the mainline and addresses any Infiltration and Inflow, as well as structural deterioration.
- n. West Markham Mainline – R6** **\$1,523,519**
This project consists of the upsizing of the mainline and addresses any Infiltration and Inflow, as well as structural deterioration.
- o. Bishop Street Upsize – R14** **\$287,964**
This project consists of the upsizing of the mainline and addresses any Infiltration and Inflow, as well as structural deterioration.
- p. Grassy Flat Main – R27** **\$1,016,199**
This project consists of the upsizing of the mainline and addresses any Infiltration and Inflow, as well as structural deterioration.
- q. Granite Mountain OMP – M20** **\$1,883,305**
This project consists of the upsizing of mainlines and addresses any Infiltration and Inflow, as well as structural deterioration.
- r. Lower Swaggerty OMP Manhole Rehab** **\$544,000**

This manhole rehab project will help to address Infiltration and Inflow, as well as repair any structural deterioration within the Lower Swaggerty area. Construction on this project will begin in 2016.

- s. **17th Street Pipeburst Upsize – R15** **\$378,662**
 This project consists of upsizing 3 sections of main line by re-laying and pipe bursting to provide adequate hydraulic capacity. Construction on this project will begin in 2016.
- t. **Fairpark Relay – R12** **\$114,665**
 This project consists of upsizing 3 sections of main line to provide adequate hydraulic capacity. Construction on this project will begin in 2016.

2. Overflow Mitigation Projects (OMPs) Planned for RLF XII:

<u>RLF XII Projects</u>	
Roselawn Cemetery Relay – R9	\$ 584,717
17 th Street Relay – R10	\$ 400,680
Victory Street Relay – R20	\$ 8,764
Rodney Parham Relay – R25	\$ 57,564
Markham to Rodney Parham Relay – R26	\$ 166,535
Upper Country Club Outfall – R19	\$ 452,300
Abigail Street Relay – R11	\$ 81,739
Cantrell Basin I/I Reduction SSES	\$ 1,763,974
Mainline Improvements for Modeled Overflows	\$ 2,153,000
Middle Hinson	\$ 1,072,073
Longfellow Subbasin 11400	\$ 1,506,951
Rose Creek Central OMP	\$ 136,383
University Avenue Relay - SECAP - R7	\$ 583,800
Rose Creek East Relay - SECAP - R13	\$ 789,470
River Ridge - SB 11200 OMP	\$ 374,602
Sherrill Heights - SB 11000 OMP	\$ 282,105
36 th Street to Mabelvale Pike Outfall	\$ 5,152,614
Overlook/Pinnacle Point OMP 10070	\$ 100,000
Jimmerson West OMP	<u>\$ 2,577,465</u>
	\$18,244,736

- Rates are in place to support completion of project. RLF application pending.

3. Overflow Mitigation Projects (OMPs) Planned for RLF XIII:

<u>RLF XIII Projects</u>	
Rose Creek Central OMP	\$ 2,686,645
36 th Street to Mabelvale Pike Outfall	\$ 8,470,005
3L078 to 3I080 (42" to 60") R3	\$ 43,355
Overlook/Pinnacle Point OMP 10070	\$ 1,085,757
Mainline Improvements for Modeled Overflows	\$10,211,249
Middle Hinson	\$ 6,559,548
Subbasin 30100 OMP	\$ 1,660,085
Rose Creek East OMP – M32	\$ 2,339,411
Cantrell Basin I/I Reduction Construction	\$ 1,640,639
Rebsamen Sewer Basin I/I Reduction	\$ 7,825,398
Rock Creek Sewer Basin I/I Reduction	<u>\$ 7,825,398</u>

\$50,347,490

- Rates are in place to support completion of project. RLF application pending.

4. Overflow Mitigation Projects (OMPs) Planned for RLF XIV:

RLF XIV Projects

Cantrell Basin I/I Reduction Construction	\$ 5,969,186
Rebsamen Sewer Basin I/I Reduction	\$12,076,516
Rock Creek Sewer Basin I/I Reduction	\$12,076,516
Rose Creek West OMP	\$ 4,218,037
Barrow OMP	\$ 6,073,995
Walton Heights Basin 11600 OMP	\$ 2,041,842
Rebsamen Collector/Murray Park 10090	\$ 437,341
Rebsamen Collector/Commercial 10500	<u>\$ 172,593</u>
	\$43,066,026

- **Future rate increase needed for project** - Yes to support design and construction of projects (2020 Rate Increase)
- **Project purpose:** SECAP/CAO/Sierra Club - Protect Health, Environment

5. Overflow Mitigation Projects (OMPs) Planned for RLF XV:

RLF XV Projects

Rebsamen Collector/Harbor 10060	\$ 602,346
Rebsamen Collector/Golf Course OMP 10080	\$ 257,376
Boyle Park Mainline - R24	\$ 729,570
Rebsamen Collector/Alltel 10400	\$ 646,694
Allsopp Park South Near CRPS – R16	<u>\$ 1,001,236</u>
	\$ 3,237,222

- **Future rate increase needed for project** - Yes to support design and construction of projects (2022 Rate Increase)
- **Project purpose:** SECAP/CAO/Sierra Club - Protect Health, Environment

6. Future Overflow Mitigation Projects (OMPs):

Future Projects

Walnut Valley OMP	\$ 2,791,600
Chicot Subbasin 40704	\$ 3,138,700
Cloverdale Subbasin 40703	\$ 4,771,400
Mabelvale Pike Subbasin 40701	\$ 2,955,800
Meadowcliff Subbasin 40701	\$ 4,864,200
Quapaw South SB 20401	\$ 2,017,800
District 84 OMP	\$ 3,066,000
Upper Coleman OMP	\$ 5,557,500
District 119 OMP	\$ 3,767,100
Mabelvale OMP	\$ 2,365,300
Quapaw North OMP	\$ 1,995,600
Foreman Lake OMP	\$ 1,252,100
Hall High South OMP	<u>\$ 3,987,400</u>
	\$42,530,500

7. Overflow Mitigation Projects (OMPs) Completed under RLF VIII:

- a. **Jimmerson Creek (RLF VIII)** – Completed in 2010.

- b. Jimmerson West Outfall (RLF VIII) – Completed in 2010.
- c. Jimmerson East and Upper Hinson Manhole Rehab (RLF VIII) – Completed in 2010.
- d. Allsopp South (RLF VIII) - Completed in 2011.
- e. Barton (RLF VIII) – Completed in 2011.
- f. System Evaluation and Capacity Assurance Plan (SECAP) Update (RLF VIII) – Completed in 2010.

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 SSORP is reviewed and revised annually to ensure all policies, procedures and contacts are accurate. 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.

V. 2015 NON-CAPACITY RELATED SANITARY SEWER OVERFLOWS

A. Compliance Standard: The Settlement Agreement limits the number of non-capacity related SSOs per 100 miles of sanitary sewer operated and maintained by LRW in LRWRC’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

When LRWRC has reduced non-capacity related SSOs to 6 per 100 miles of sewer mains for two (2) consecutive calendar years, LRWRC shall be deemed to have complied with all provisions of this agreement related to non-capacity related SSOs.

B. Non-Capacity Related SSOs in 2015: There were 49 non-capacity related SSOs reported in 2015. Of the 49 total, thirteen (13) SSOs were related to construction and vandalism. The result was a total of 36 non-capacity related overflows attributed to the operation and maintenance of the LRW collection system. Of the 36 non-capacity related overflows, three (3) SSOs were attributed to debris; two (2) SSO were attributed to equipment failure; six (6) SSOs were attributed to grease; five (5) SSOs were attributed to line failures; twenty (20) SSOs were attributed to roots.* A complete listing of non-capacity related SSOs is provided under Attachment E.

C. Compliance Assessment: LRW has reduced the number of non-capacity related sanitary sewer overflows attributed to the operation and maintenance of the collection system owned by LRW to below 6 per 100 miles of sewer lines for twelve (12) consecutive calendar years, - 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, 2011 with a total of 45, 2012 with a total of 49, 2013 with a total of 46, 2014 with a total of 36, and 2015 with a total of 36. 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.

D. Additional Projects Not Covered By SECAP: In addition to the progress made on SECAP projects during 2015, LRW spent approximately \$3,676,250.00 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.

In a continued effort to maximize LRW's rehab dollars, LRW treated 66,713 feet of mainline in 2015 with a contracted chemical root removal company with a total cost of \$95,755.62. Root removal is an important component of LRW's Plan 66 that targets SSO reduction.

LRW personnel completed work on 278 line segments that were in need of point repairs as well as relocated or replaced 7,559 feet of sewer line.

14,272 feet of sewer line was rehabilitated under the 2015 maintenance contracts for pipe bursting and cured-in-place-pipe (CIPP), for a total cost of \$1,876,079.

In 2015, the Cleaning and Inspection Department Televised 576,092 feet, Hand Cleaned 590,880 feet, Hydro Cleaned 1,714,458 feet, and Line Walked 1,531,339 feet of sewer lines.

VI. 2015 CAPACITY RELATED SANITARY SEWER OVERFLOWS

A. Compliance Standard: The Settlement Agreement requires that capacity related SSOs be mitigated, provided 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

* 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.

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 2015: There were 309 capacity related SSOs reported in 2015 at 74 locations. There were four (4) rain events recorded in 2015 measuring above the Design Storm which resulted in one hundred fifty-nine (159) capacity related overflows. Two (2) of these storms happened within a 72 hour period. The remaining 150 capacity related overflows occurring in 2015, resulted from rain events measuring below the Design Storm threshold. A complete listing of capacity related SSOs is provided under Attachment F.

VII. UPDATE OF THE CONSTRUCTION PROJECTS PURSUANT TO ATTACHMENT "B" OF THE CAO

In previous reports, this section presented a table that updated the anticipated completion dates of projects listed in the CAO. Since the Order was filed in 2006, LRW has worked diligently to comply with the terms set forth and the work has produced significant results. However, our work is not through and requires a renewed assessment of both approach and methodology to accomplish the terms of the Order. In early 2015, LRW staff met with ADEQ staff to show progress and the renewed effort LRW would like to take to assure success for the rate payers of Little Rock and the environment. To enable that success, ADEQ granted an extension of the CAO to December 31, 2023. Immediately following the extension, LRW redeveloped its capital improvement plan that now enumerates projects with new completion dates.

In 2015, the Little Rock Board of Directors granted LRW a rate adjustment that will support funding of a portion of the projects needed to comply with the CAO. The adjustment will support both facility and collection system projects through 2021. The following table presents a renewed Capital Improvement Plan that will accomplish the terms of the order.

LRW is proud of the progress to date and remains committed to the terms of order and amendments.

Description	Project Number	Intermediate Completion Date In CAO	Previously Adjusted Intermediate Completion Date	Current Estimated Completion Date	Actual Completion Date	Status as of 31-Dec-15	
Collection System							
1 OH - OG Relocation	3120400	RLF 11		31-Mar-16		Construction	
2 Allsop North Country Club Rehabilitation	4060300	RLF 11		31-Dec-12	31-Dec-14	Completed	
3 Leewood OMP	4070600	RLF 11		31-Dec-14	30-Jun-15	Construction	
4 Echo Valley OMP	4070700	RLF 11		31-Dec-12	31-Dec-14	Construction	
5 Pleasant Valley	4070800	RLF 11		31-Dec-10	31-Dec-14	Completed	
6 Lower Swaggerty OMP	4080200	RLF 11		28-Feb-17		Construction	
7 Springer Blvd. Relay	4111300	RLF 11		28-Feb-17		Design	
8 West Markham Mainline	4112300	RLF 11		31-Dec-16		Design	
9 Fairpark Relay	4112900	RLF 11		31-Dec-16		Design	
10 Bishop Street Relay	4113400	RLF 11		31-Dec-16		Design	
11 42 Inch Force Main Inspection & R29	4120900	RLF 11		30-Jun-16		Construction	
12 Grassy Flat Main	4120400	RLF 11		31-Dec-16		Design	
13 Allsopp Park and Country Club	4131900	RLF 11	31-Dec-14		19-Jan-15	Completed	
14 University Avenue Relay - SECAP - R7	4112400	RLF 12		31-Dec-16		Design	
15 Roselawn Cemetery Relay - SECAP - R9	4112600	RLF 12		31-Dec-16		Design	
16 17th Street Relay - R10	4112700	RLF 12		31-Dec-16		Design	
17 Granite Mountain OMP - M20	4080100	RLF 12		31-Dec-17		Design	
18 Rose Creek East Relay - SECAP - R13	4113000	RLF 12		31-Dec-16		Design	
19 Victory St. Relay - SECAP R20	4113500	RLF 12		31-Dec-16		Design	
20 Rodney Parham Relay - SECAP - R25	4113600	RLF 12		31-Dec-16		Design	
21 Markham to Rod Parham Relay - SECAP R26	4113700	RLF 12		31-Dec-16		Design	
22 Upper Country Club Outfall - R19	4120800	RLF 12		31-Dec-16		Future	
23 17th Street Pipe Burst - R15	4123000	RLF 12		31-Dec-16		Design	
24 Jimerson West OMP	4083100	RLF 12		31-Oct-18		Future	
25 Longfellow OMP - Subbasin 11400	4084600	RLF 12		31-Oct-18		Future	
26 Abigail Street Relay - R11	4112800	RLF 12		31-Dec-17		Future	
27 River Ridge - SB 11200 OMP	4115000	RLF 12		31-Oct-18		Future	
28 Sherrill Heights - SB 11000 OMP	4115100	RLF 12		31-Oct-18		Future	
29 Cantrell Basin I/I Reduction SSES	4160300	RLF 12		31-Oct-18		Future	
30 Rose Creek Central OMP	4101800	RLF 12 & 13		31-Dec-19		Future	
31 36th Street to Mabelvale Pike Outfall - R22 & R3	4120500	RLF 12 & 13		30-Jun-18	31-Dec-21	31-Dec-19	Preliminary
32 Overlook/Pinnacle Point 10070	4121400	RLF 12 & 13		31-Dec-19			Future
33 Mainline Improvements for Modeled Overflows/Growth	4121900	RLF 12 & 13		31-Dec-21		31-Dec-20	Future
34 Middle Hinson	4160600	RLF 12 & 13		31-Dec-20			Future
35 Subbasin 30100 OMP	4080300	RLF 13		31-Dec-12	31-Dec-15	31-Dec-19	Future
36 Sewer Assessment Lines >18"	4190200	RLF 13		31-Dec-19		31-Dec-20	Future
37 Rose Creek East OMP SB 10901 - M32	4101500	RLF 13 & 14		31-Dec-21			Future
38 Cantrell Basin I/I Reduction Construction'	4160300	RLF 13 & 14		31-Dec-22			Future
39 Rebsamen Sewer Basin I/I Reduction	4160700	RLF 13 & 14		31-Dec-23			Future
40 Rock Creek Sewer Basin I/I Reduction	4160800	RLF 13 & 14		31-Dec-23			Future
41 Rose Creek West OMP	4101900	RLF 14		31-Dec-22			Future
42 Barrow OMP SB 30700	4110400	RLF 14		31-Dec-09	31-Dec-16	31-Dec-22	Future
43 Walton Heights - Basin 11600 OMP	4114900	RLF 14		31-Dec-21			Future
44 Rebsamen Collector/Murray Park 10090	4120700	RLF 14		31-Dec-22			Future
45 Rebsamen Collector/Commercial 10500	4121200	RLF 14		31-Dec-22			Future
46 Sewer Repairs Lines > 18"	4200200	RLF 14 & 15		31-Dec-23			Future
47 Rebsamen Collector/Harbor 10060	4121300	RLF 15		31-Dec-23			Future
48 Rebsamen Collector/Golf Course OMP 10080	4121500	RLF 15		31-Dec-23			Future
49 Boyle Park Mainline - (EXH C-RQ19) R24	4121600	RLF 15		31-Dec-23			Future
50 Rebsamen Collector/Alltel 10400	4121800	RLF 15		31-Dec-23			Future
51 Allsopp Park South Near CRPS - R16	4160500	RLF 15		31-Dec-23			Future
52 Needed Collection System Projects				31-Dec-25			Future
53 Linework to North 60					31-Dec-14	30-Jun-18	
Pump Stations							
54 Cantrell PS Upgrade & Force Main	6130100			31-Dec-15		31-Jul-15	16-Oct-15
55 Peak Flow Additional Pump	6130400	RLF 12		31-Dec-17		31-Oct-18	Design
56 Jamison Pump Station Upgrade	6130500	RLF 12		28-Feb-18		31-Oct-18	Future
Treatment Plant							
57 Scott Hamilton Peak Flow Equalization Facilities	7130100	RLF 12		31-Dec-17		31-Oct-18	Design
58 Fourche Creek WTF Phase III Rehabilitation	7160100	RLF 12	AA	31-Dec-09	31-Mar-19	31-Dec-17	Design
59 Adams Field Storage & Disinfection Facilities	7130300	RLF 14		30-Sep-18		31-Dec-23	Preliminary
60 Adams Nutrient Removal (Ammonia)	7150100	RLF 12, 13, 14	AA	31-Dec-21			Preliminary

* formerly known as Mabelvale Peak Flow

~ projects listed in the SECAP update

AA projects related to permit modifications or reliability upgrades

VIII. CONCLUSION

Since the filing of the Consent Administrative Order in 2006, LRW has come a long way in mitigating SSOs. LRW plans on taking a holistic approach in improving the current system by rehabilitating and replacing existing infrastructure that contributes to SSOs. LRW is committed to protecting public health and being a good steward of the environment.

ATTACHMENT A
SANITARY SEWER OVERFLOW RESPONSE
PLAN

SANITARY SEWER OVERFLOW RESPONSE PLAN

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Little Rock Wastewater
SANITARY SEWER OVERFLOW RESPONSE PLAN
(As Amended February 10, 2016)

I. AUTHORITY

A. National Pollutant Discharge Elimination System (“NPDES”)

NPDES Permit for AFWTF # AR0021806

NPDES Permit for FCWTF # AR0040177

NPDES Permit for LMTP #AR0050849

Issued by Arkansas Department of Environmental Quality (“ADEQ”)

II. GENERAL

The **Sanitary Sewer Overflow Response Plan (“SSORP”)** is designed to ensure that every report of a confirmed sanitary sewage overflow is immediately dispatched to the appropriate crew so that the effects of the overflow can be minimized with respect to the impacts on public health, sewer system integrity, quality of surface waters, and customer service. The SSORP further includes provisions to ensure safety pursuant to the directions provided by ADEQ and that notification and reporting is made to the appropriate local, state, and federal authorities. For purposes of this SSORP, “confirmed sewage spill” is also sometimes referred to as “sewer overflow,” “overflow,” or “sanitary sewer overflow” or (“SSO”). The effective date of this plan is **September 30, 2002**.

A. Objectives

The primary objectives of the SSORP are to protect public health and the environment, as well as, to satisfy regulatory agencies and waste discharge permit conditions which address procedures for managing SSOs, and to minimize risk of enforcement actions against Little Rock Wastewater (“LRW”).

Additional objectives of the SSORP are as follows:

- Provide appropriate customer service;
- Protect wastewater treatment plant and collection system personnel;
- Protect the collection system, wastewater treatment facilities, and the assets of LRW; and
- Protect private and public property beyond the collection and treatment facilities.

This plan shall not supersede existing emergency plans or standard operating procedures (SOPs) unless directed by the LRW C.E.O.

B. Organization of Plan

The key elements of the SSORP are addressed individually as follows:

Section III Overflow Response Procedure
Section IV Public Advisory Procedure
Section V Regulatory Agency Notification Plan
Section VI Media Notification Procedure
Section VII Distribution and Maintenance of SSORP

C. SSO Tracking

A procedure to track the frequency, type and location of SSOs has been prepared under *Appendix A*.

Data on each SSO occurrence is maintained in a database that can be analyzed based on any recorded SSO parameter. The database is maintained and backed up on a regular basis by the Information Services Department.

III. OVERFLOW RESPONSE PROCEDURE

The Overflow Response Procedure presents a strategy for LRW to mobilize labor, materials, tools, and equipment to correct or repair any condition which may cause or contribute to an unpermitted discharge. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land, or buildings.

A. Receipt of Information Regarding a SSO

A SSO may be detected by LRW employees or by others. The Collection System Maintenance Dispatcher (Cleaning and Inspection Section) or ("*Dispatcher*") is primarily responsible for receiving phone calls from the public of possible SSOs from the wastewater collection system, and for forwarding service requests to the Cleaning and Inspection Crews.

Generally, Dispatchers in the Collection System Maintenance Division receive telephone calls from the public reporting possible SSOs. The emergency phone line is staffed 24 hours per day, every day of the year. The Administration Department has a program in place for educating the public to report SSOs that they observe and to provide the phone number to be called.

1. The Dispatcher (or Emergency Response Crew Leader) obtains all relevant information available regarding the possible overflow including:
 - a. Time and date call was received;
 - b. Specific location;
 - c. Description of problem;
 - d. Time and date overflow was observed;
 - e. Caller's name and phone number;
 - f. Observations of the caller (e.g., odor, duration, back, or front of property); and
 - g. Other relevant information that will enable the responding Emergency Crews to quickly locate, assess and stop the SSO.

Once the SSO has been confirmed by the responding crew, the Dispatcher records/inputs the SSO information and creates a service request number for assignment to the responding crew. If the SSO was reported as being in a 'Ditch', the Dispatcher consults the Arc Map database to

determine if the drainage area is a named waterway. Dispatcher informs Responding Crew if the result was a 'Ditch' or a named waterway so that the proper Overflow Report Form can be completed. Black Overflow Report Forms are to be used when the drainage area is an unnamed ditch and a red Overflow Report Form is used when the drainage area is a named waterway (creek/stream/river).

2. Pump station failures are monitored and received by operators on duty at the Adams Field, Fourche Creek, and Little Maumelle Wastewater Treatment Facilities. The operator on duty immediately conveys all information regarding alarms to the Superintendent of Facilities and Equipment in order to initiate the investigation. Investigating crew determines if the failure resulted in an overflow and then reports the findings to the Collection System Maintenance Dispatcher if an SSO has occurred. A completed Overflow Report Form shall be sent via e-mail to the Collection System Maintenance Administrator for documentation.
3. SSOs detected by any personnel in the course of their normal duties are reported immediately to the Collection System Maintenance Dispatcher who records all relevant SSO information and dispatches an Emergency Crew and additional response crews as needed.
4. Collection System Maintenance Emergency Crew or Response Crew confirms the SSO. Until verified, the report of a possible spill will not be referred to as a "sewer overflow."

If an overflow has occurred, the crew leader completes the appropriate Overflow Report Form and follows the Sanitary Sewer Overflow Response Tracking Protocol (See Figure III-1)

LITTLE ROCK WASTEWATER UTILITY
SANITARY SEWER OVERFLOW OR BYPASS REPORTING FORM
WHEN USING THIS FORM, SEND AN EMAIL WITH THE SSO DATE AND LOCATION TO
Waterenfssso@adeq.state.ar.us WITHIN 24 HOURS!

SERVICE REQUEST NUMBER: _____

REPORTED BY: _____ ADDRESS: _____

CALL TIME: _____ **AM or PM** CALL DATE: _____
 (circle one)

RESPONSE DATA:

CREW LEADER: _____

ARRIVAL TIME _____ **AM or PM** DATE: _____

COMPLETED TIME: _____ **AM or PM** DATE: _____

ACTION(S) TAKEN: _____ **HC = Hydro-cleaned** _____ **EC = Environmental Cleanup** _____ **PN = Public Notice**
 _____ **HR = Hand Rodded** _____ **EN = Report to Engineering** _____ **WO = Work Order**

SSO DATA:

DATE OF SSO: _____ TIME OF SSO: _____ **AM or PM**
 (circle one)

LOCATION: _____ ADDRESS: _____

CAUSE: _____ **RO = Root** _____ **D = Debris** _____ **EF = Equipment Failure**
 _____ **G = Grease** _____ **LF = Line Failure**
 _____ **R = Rainfall** _____ **HC = Hydrocleaning**
 _____ **CO = Construction** _____ **VA = Vandalism**

FATE: _____ **CR = Creek/Stream/River** _____ **DI = Ditch** _____ **DR = Drop Inlet**
 _____ **GR = Ground Surface** _____ **PA = Paved Area** _____ **CB = Contained in Building**
 _____ **GRCB = Ground Surface & Building**

If **CR**, provide name: _____

ACTIVE DISCHARGE: _____ **YES** _____ **NO (Evidence of Discharge)**

OBSERVED FLOWRATE _____ **GALLONS PER MINUTE**

ESTIMATED DURATION: _____ **MINUTES**

NOTE: If SSO is active when found, the actual volume may be greater than the known volume.

ESTIMATED VOLUME: _____ **GALLONS**

IF "**GRCB**" IS CHECKED, ESTIMATE GALLONS WITHIN BUILDING: _____

IMPACT:

_____ **OEHC = Observed or Evidence of Human Contact and/or Environmental Impact**
 _____ **EFK = Evidence of Fish Kill**

Revision Date:--January 30, 2015

**LITTLE ROCK WASTEWATER UTILITY
SANITARY SEWER OVERFLOW OR BYPASS REPORTING FORM**

SERVICE REQUEST NUMBER: _____

REPORTED BY: _____ ADDRESS: _____

CALL TIME: _____ **AM or PM** CALL DATE: _____
(circle one)

RESPONSE DATA:

CREW LEADER: _____

ARRIVAL TIME _____ **AM or PM** DATE: _____

COMPLETED TIME: _____ **AM or PM** DATE: _____

ACTION(S) TAKEN: _____ **HC = Hydro-cleaned** _____ **EC = Environmental Cleanup** _____ **PN = Public Notice**
_____ **HR = Hand Rodded** _____ **EN = Report to Engineering** _____ **WO = Work Order**

SSO DATA:

DATE OF SSO: _____ TIME OF SSO: _____ **AM or PM**
(circle one)

LOCATION: _____ ADDRESS: _____

CAUSE: _____ **RO = Root** _____ **D = Debris** _____ **EF = Equipment Failure**
_____ **G = Grease** _____ **LF = Line Failure**
_____ **R = Rainfall** _____ **HC = Hydrocleaning**
_____ **CO = Construction** _____ **VA = Vandalism**

FATE: _____ **DI = Ditch** _____ **DR = Drop Inlet**
_____ **GR = Ground Surface** _____ **PA = Paved Area**

ACTIVE DISCHARGE: _____ **YES** _____ **NO (Evidence of Discharge)**

OBSERVED FLOWRATE _____ **GALLONS PER MINUTE**

ESTIMATED DURATION: _____ **MINUTES**

ESTIMATED VOLUME: _____ **GALLONS**

NOTE: If SSO is active when found, the actual volume may be greater than the known volume.

IMPACT: _____ **NEAH = No Evidence of Adverse Health or Environmental Impacts**

Revision Date: January 30, 2015

FIGURE III-1. SSO RESPONSE TRACKING PROTOCOL

1. Crew that locates overflow fills out Overflow Report Form:
 - a) RED FORMS are used when there is evidence of human contact or environmental impact. When using this form, the responding crew leader shall send an email to waterenfssso@adeq.state.ar.us within 24 hours, stating the date and location of the SSO (as per the revised AFWWTP permit language). Dispatcher will use the Arc Map database to assist Responding Crew in determining if an SSO in a drainage area is either a ditch or a named waterway (creek/stream/river). If it is determined that the fate is a named waterway, the SSO shall be reported on a red Overflow Report Form. If the fate is an unnamed ditch, the SSO shall be reported on a black Overflow Report Form.
 - b) BLACK FORMS are used when there is NO evidence of environmental impact and/or human contact.
2. Crew that locates overflow notifies Area Foreman and Dispatch. Dispatch assigns a service number for tracking.
3. Area Foreman (or Locating Crew) installs warning signs
4. Area Foreman (or Locating Crew) takes photographs *before* cleanup
5. Crew cleans and sanitizes
6. Area Foreman verifies cleanup is done correctly. If within a structure assures photos are taken within the structure, volume is estimated, the Customer Flood Report is properly completed, and contact information for the Communications Coordinator is provided if applicable (i.e. damage claims).
7. Area Foreman removes warning signs
8. Area Foreman takes photographs *after* cleanup
9. Area Foreman verifies Overflow Report Form is turned into Collection System Maintenance Administrator (Same Day)
10. Collection System Maintenance Administrator downloads photographs into database
11. Collection System Maintenance Administrator enters overflow information into the SSO event database
12. Plant Superintendent reports SSO data to ADEQ and other departments as required by NPDES Permits

B. Dispatch of Appropriate Crews to Site of Sewer Overflow

Failure of any element within the wastewater collection system that threatens to cause or causes a SSO triggers an immediate response to isolate and correct the problem. Crews and equipment are available to respond to any SSO location 24-hours a day. Additional maintenance personnel are designated "on call" in the event that extra crews are needed. Appendix B summarizes the SSO Action Plan.

1. Dispatching Crews
 - Dispatchers receive notification of possible SSOs (as outlined in Section III-A entitled "Receipt of Information Regarding an SSO") and dispatch an Emergency crew or the appropriate Area Foreman as required.
 - Dispatchers notify the appropriate Supervisor or Area Foreman by phone regarding SSOs and field crew locations.
2. Crew Instructions and Work Orders
 - Responding crews are dispatched by phone. The Maintenance Dispatcher receives instructions from the responding crews or their Supervisors regarding the appropriate crews, materials, supplies, and equipment needed.
 - Dispatchers verify that the entire message has been received and acknowledged by the crews who were dispatched. All standard communications procedures are followed. All employees being dispatched to the site of a SSO proceed immediately to the site of the overflow. Any delays or conflicts in assignments are reported immediately to the Supervisor for resolution.
 - In all cases response crews report their findings to Area Foreman or Supervisor immediately upon making their investigation, including possible damage to private and public property. If Area Foreman or Supervisor has not received findings from the field crew within 1 hour, Area Foreman or Supervisor contacts the response crew to determine the status of the investigation.

3. Additional Resources

- The Area Foreman or Supervisor receives requests for additional personnel, material, supplies, and equipment from crews working at the site of a SSO, and conveys the requests to the appropriate parties.

4. Preliminary Assessment of Damage to Private and Public Property

- The focus is to resolve the problem. The response crews use discretion in assisting the property owner/occupant as reasonably as they can. Be aware that LRW could face increased liability for any further damages inflicted to private property during such assistance. In the event the SSO occurs inside a structure, the Communications Coordinator shall be notified and shall personally assess and document all damages as well as notify the Supervisor of the event. The response crew shall enter private property for purposes of overflow reporting. NOTE: A Collections System Maintenance Supervisor can take the place of the Communications Coordinator in damage assessment activities relating to the time-sensitive information in the case that the Communications Coordinator is unable to be on site at that time. In this case, the Collection System Maintenance Supervisor will provide the customer with the Communications Coordinator's business card. All communication regarding damage claims will take place between the property owner and the Communications Coordinator. The crew shall also notify the Area Foreman to take appropriate still photographs, if possible, of the area of the SSO and the impacted area in order to thoroughly document the nature and extent of impact.

5. Field Supervision and Inspection

- The Area Foreman of the responding crew (or whomever confirmed the SSO), visits the site of the SSO, if possible, and takes photos and installs warning signage to ensure that provisions of this Overflow Response Plan and other directives are met.

6. Coordination with Hazardous Material Response

- Upon arrival at the scene of an SSO, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g., gasoline)

not common to the sewer system be detected, the responding crew should secure the immediate area and should contact the Dispatcher or Safety Department. **Remember that any vehicle engine, portable pump or open flame (e.g., cigarette lighter) can provide the ignition for an explosion or fire should flammable fluids or vapors be present. Keep a safe distance and observe caution until assistance arrives.**

- Subsequent response actions should follow existing LRW procedures for "DETECTING POTENTIAL EXPLOSIVE OR TOXIC CONDITIONS". These procedures are detailed in the LRW Safety Manual and attached as Appendix C.
- Only when the Safety Department determines it is safe and appropriate for personnel to resume activities can they then proceed under the SSORP with the containment, clean-up activities, and correction.

C. Overflow Correction, Containment, and Clean-Up

SSOs of various volumes occur from time to time in spite of concerted prevention efforts. Spills may result from blocked sewer lines, pipe failures, or mechanical malfunctions among other natural or man-made causes. LRW is constantly on alert and ready to respond upon notification and confirmation of an overflow.

This section describes specific actions to be performed by the crews during a SSO.

The objectives of these actions are:

- To protect public health, the environment and property from sewage overflows and to restore the surrounding area back to normal as soon as possible;
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts;
- To contain the SSO to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the LRW exposure to any regulatory agency penalties and fines.

Under most circumstances, LRW handles all response actions with its own maintenance forces. They have the skills and experience to respond rapidly and in the most

appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system. For example, repair of a force main could require the temporary shutdown of the pump station and diversion of the flow at an upstream location. If the closure is not handled properly, sewage system backups may create other overflows.

Circumstances may arise when LRW could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering should excavation be required. LRW may also choose to use private contractors for open excavation operations that might exceed one day to complete.

1. Responsibilities of Response Crew upon Arrival

It is the responsibility of the initial responding crew that arrives at the site of an SSO to protect the health and safety of the public by mitigating the impact of the SSO to the extent possible. Should the SSO not be the responsibility of LRW, LRW shall notify Little Rock Code Enforcement of the incident.

Upon arrival at an SSO, the initial response crew:

- Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Identifies and requests, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause;
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, repairs pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way); and
- Requests additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the SSO.

2. Initial Measures for Containment

Measures to contain and / or recover the overflowing sewage are initiated in order to minimize the impact to public health or the environment.

- Determine the immediate destination of the SSO, e.g. storm drain, street curb gutter, body of water, creek bed, etc.; Dispatchers can use the Arc Map database to assist in determining if the destination of the SSO is a named waterway (creek/stream/river) or an unnamed waterway (ditch).
- Identify and request the necessary materials and equipment to contain or isolate the overflow if not readily available; and
- Take immediate steps to contain the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc. if conditions allow as determined by LRW Maintenance Department.
- In the event an SSO has discharged into a creek, stream, or river, immediate measures to eliminate and contain the discharge will be taken. Immediate steps to eliminate the SSO discharging into a creek, stream, or river can include the following:
 - Establish bypass pumping of sewer to other areas of the collection system or holding tanks until repairs can be made
 - Utilize equipment that can vacuum sewer to eliminate or contain overflow until repairs can be made

Once corrective action has been taken to restore flow to the collection system, immediate measures will be taken to contain and remove contaminants from the waterway as feasible. The focus is to remove oxygen-depleting solids from water, returning it back into the collection system. Efforts can include the following:

- Establishing strategic points of containment along the waterway and removing contaminants through pumping, vacuuming, sweeping, etc.
- Applying disinfectants as feasible along edges of waterway to eliminate contamination
- Utilize portable aerators as feasible along edges of waterway to maintain adequate oxygen levels in water to preserve aquatic life until proper removal of contaminants is achieved

3. Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, a portable bypass pumping operation should be set up around the obstruction.

- Take appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Implement continuous or periodic monitoring of the bypass pumping operation as required.
- Address regulatory agency issues in conjunction with emergency repairs.

4. Cleanup

SSO sites are to be thoroughly cleaned after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, rubber products) is to remain.

- Where practical, thoroughly flush the area and clean of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- Secure the overflow to prevent contact by members of the public until the site has been thoroughly cleaned. If posting is required, refer to Section IV.
- Where appropriate, disinfect and deodorize the overflow site.
- Where sewage has resulted in ponding, pump the pond dry and dispose of the residue in accordance with applicable regulations and policies.
- If a ponded area contains sewage which cannot be pumped dry, it may be treated with approved waterway application that is designed to kill bacteria. If sewage has discharged into a body of water that may contain fish or other aquatic life, do not use bleach or other appropriate disinfectant and contact the Arkansas Game & Fish Commission for specific instructions.
- Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in existing surface water is expected.
- Do not use enzymes in flowing creeks, streams, or waterways

- A Collection System Maintenance Supervisor will submit an after-the-fact Short Term Activity Authorization (STAA) after the work is completed for overflows in named creeks/streams/ivers.

D. Overflow Report

Emergency crew or response crew completes an Overflow Report Form (See Figure III-1). Emergency crew or response crew promptly notifies Dispatcher when the SSO is eliminated. Information regarding the SSO includes the following:

- Indication that the SSO reached surface waters, i.e., all SSOs where sewage was observed running to surface waters, or where there was obvious indication (e.g. sewage residue) that sewage flowed to surface waters.
- Indication that the SSO reached and discharged without containment into a storm drain, ditch, drop inlet, or catch basin. If the overflow was contained in a named creek/stream/river, the name of the waterway must be supplied or, if the waterway is not a named waterway, the fate should be logged as "ditch." Dispatchers can utilize the Arc Map database to help in determining if the SSO reached a named waterway (creek/stream/river) or an unnamed waterway (ditch).
- Indication that the SSO had not reached surface waters. Guidance in characterizing these overflows includes:
 - a. SSO to covered storm drains (with no public access) where personnel verify, by inspection, that the entire volume is contained in a sump or impoundment and where complete clean up occurs leaving no residue.
 - b. Preplanned or emergency maintenance jobs involving bypass pumping if access by the public to a bypass channel is restricted and subsequent complete clean up occurs leaving no residue. Any preplanned bypass under these circumstances will not be considered an overflow; and
 - c. SSOs where observation or on-site evidence clearly indicates that all sewage was retained on land and did not reach surface water and where complete cleanup occurs leaving no residue.
- Determine the start time of the SSO by one of the following methods:

- a. Date and time the information was received and/or reported to have begun and later substantiated by the Emergency Crew or Response Crew: See below for how the time of the SSO is determined:
 - Capacity-Related Overflows:
 1. An email is received by Collection System Maintenance from Engineering personnel, confirming that a category (A, B, C,) rain event has occurred and also stating at what time it became a category (A, B, C) rain event.
 2. Collection System Maintenance personnel reviews LRW Operations rainfall data (based upon minute-by-minute data from Little Rock rain gauge locations) to determine the time that the rain began to diminish.
 3. From this data, Collection System Maintenance personnel determines the TIME OF SSO by choosing a time that is approximately one (1) hour after the rain began to diminish, thus allowing the water to begin seeping into the ground and into the LRW Collection System.
 4. The determined TIME OF SSO is sent to all Area Foremen/Walking Line Crews via email (and is also communicated to Dispatchers)
 5. The determined TIME OF SSO is consistently used by all Area Foremen/Walking Line crews/Response Crews on the LRW Overflow Report Form in the *Date of SSO* and *Time of SSO* fields for each SSO found that is related to the corresponding rain event.
 - Non-Capacity Related Overflows:
 1. The TIME OF SSO is when the response crew arrives on site and confirms that the reported sewage spill is an actual overflow. Thus, the *Time of SSO* and the *Start Time* will be identical and will be recorded as such in the Hansen database system as well as on the LRW Overflow Report Form.
- b. Visual observation; or
- c. Pump station and lift station flow charts and other recorded data.
- Determine of the stop time of the SSO by one of the following methods:

- a. When the blockage is cleared or flow is controlled or contained; or
- b. The arrival time of the Emergency crew or response crew, if the SSO stopped between the time it was reported and the time of arrival.

- Visual observations

An estimation of the rate of SSO in gallons per minute (GPM) by one of the following criteria

- a. Direct observation of the overflow. See *Appendix D* for guidance on estimating sewer overflow rates.

- b. Measurement of actual overflow from the sewer main.

- Determination of the volume of the SSO:

- a. When the rate of the overflow is known, multiply the duration of the overflow by the overflow rate; or

- b. When the rate of the overflow is not known, investigate the surrounding area for evidence of ponding or other indications of overflow volume.

- Photographs of the event, before and after cleanup, when possible.

- Assessment of any damage to the exterior areas of public/private property: Personnel shall enter private property for purposes of estimating determining SSO volume.

E. Customer Satisfaction

- When a “fishkill/human contact” SSO is reported, the Hansen database automatically notifies the Administration Department when all SSO information is entered into the database. The Administration Department will then contact the reporting citizen and discuss the actions taken and the problem resolution. If the resident wants to make a claim for damages incurred, the Administration Department informs the resident of LRW’s damage claim process. When a “non- fishkill” SSO occurs, the Administration Department is notified and, if necessary, takes any follow up action required (i.e. notify media or residents affected).

F. Responding to Overflow Locations Where a SSO has Reoccurred Prior to the Initial SSO being Completed

- When an SSO has been confirmed to have reoccurred prior to the initial SSO reported being closed, then the initial SSO reported will be closed with associated details.
- The reoccurring SSO that has been confirmed will be recorded as another SSO incident with associated details.

- In the event that manhole locations listed in Table A-2 of this document become inaccessible to LRW crews, the crew will conduct site visits daily until the site becomes accessible; crews will use an emergency call work order activity to track the daily site visits/to document site conditions. If an SSO has in fact occurred once the manhole becomes accessible, the same service request will be associated to the emergency work orders AND to the SSO for tracking purposes. All associated work order numbers can be found associated to the same service request number.

IV. PUBLIC ADVISORY PROCEDURE

This section describes the actions LRW takes, in cooperation with ADEQ and the Arkansas Department of Health to limit public access to areas potentially impacted by unpermitted discharges of pollutants to surface water bodies from the wastewater collection system. Temporary and permanent public notices will be provided as indicated below. A sample of both notices is provided in *Appendix E*.

A. Temporary Public Notice for Polluted Surface Water Bodies or Ground Surfaces that Result from Uncontrolled Wastewater Discharges from LRW Facilities

LRW has the primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

Table IV-1 outlines the decision process to recommend to the CEO that posting of a confirmed SSO be undertaken or that there is reasonable potential for an SSO to occur, thus the need to post in advance. If posting is deemed necessary, ADEQ shall be notified.

B. Permanent Public Notice

LRW shall place a permanent notice at manholes located on City-owned property that may experience SSOs more than once in any twelve-month period. A list of applicable manholes has been provided in Appendix A, Table A-1.

Table IV-1

Decision Process to Post Temporary Signage for Polluted Surface Water Bodies or Ground Surfaces that Result from Uncontrolled Wastewater Discharges from LRW Facilities

Category	Step	Event
Reported Overflow	1	Collection System Maintenance Division Supervisor or Response Crew confirms that the SSO that is not posted has resulted in ponded wastewater (ground surface or ditch ponding) or direct discharge to body-contact recreational waters between May 1st and September 30th.
	2	Collection System Maintenance Division Supervisor notifies Director of Engineering Services Division and provides relevant SSO information. <ul style="list-style-type: none"> a) SSO Location b) Remedial actions being taken
	3	Director of Engineering Services dispatches investigator to consult with Collection System Maintenance Division on remedial actions and need and extent of posting
	4	Dispatched Investigator notifies Director of Engineering & Collection System Maintenance Division of assessment and makes recommendation on posting
	5	Director of Engineering consults CEO for final decision on posting
	6	If CEO decides posting is required, CEO directs Collection System Maintenance Division to post warning sign(s) and notifies the Chief Administration Officer of intent to post and location
	7	Warning sign(s) is/are posted by Collection System Maintenance Division
Potential Overflow	1	Reasonable potential for SSO that will result in ponded wastewater (ground surface or ditch ponding) or direct discharge to body-contact recreational waters between May 1st and September 30th identified.
	2	Director of the Division identifying potential SSO consults with CEO for final decision on posting
	3	If CEO decides posting is required, CEO directs Collection System Maintenance Division to post warning signs and notifies the Chief Administration Officer of intent to post and location
	4	Warning sign(s) is/are posted by Collection System Maintenance Division

C. Other Public Notification

If the CEO determines additional public notification is needed, the Communications Department will make said notifications under the CEO's direction.

V. REGULATORY AGENCY NOTIFICATION PLAN

The Regulatory Agency Notification Plan establishes procedures that LRW follows to provide formal notice to ADEQ as necessary in the event of SSOs. The reporting criteria that are listed below explain to whom various forms of notification should be made and also provide those agencies/individuals to be contacted.

Agency notifications will be performed in parallel with other internal notifications. The procedures for providing notification to the media of an SSO are presented in Section VI - Media Notification Procedure. Internal notification and mobilization of personnel are detailed in Section III - Overflow Response Procedure.

A. Immediate Notification

Upon data entry of a SSO event, an automated electronic event notification is sent to the Adams Fields Plant Operations Superintendent. The Adams Field Facility Superintendent then notifies and reports the SSO to ADEQ in compliance with LRW's Adams Field's NPDES Permit. For convenience, the applicable NPDES Permit reporting requirements are reprinted below.

"The permittee shall report all overflows with the Discharge Monitoring Report (DMR) submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: The date, time, duration, location, estimated volume, and cause of overflow; observed environmental impacts from the overflow; action taken to address the overflow; and ultimate discharge location if not contained (e.g. storm sewer system, ditch, tributary). Overflows, which endanger health or the environment, shall be orally reported to this department (Enforcement Section of Water Division) within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment shall be provided within 5 days of the time the permittee becomes aware of the circumstance."

The Operations Secretary is responsible for meeting the 24-hour oral, fax, or online notification requirement. The name, mailing address, e-mail address, and telephone number for LRW's primary ADEQ contact is provided below:

Leslie Allen-Daniel
ADEQ Enforcement Analyst
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72218
Telephone: 501.682.0630
Email: allen-daniel@adeq.state.ar.us

B. Secondary Notifications

After those parties identified in Section A. Immediate Notification have been contacted, the Communications Department will notify other federal, state, and local agencies, as well as other interested and possibly impacted parties as directed by the CEO.

VI. MEDIA NOTIFICATION PROCEDURE

When an SSO has been confirmed and is a threat to public health, take the following actions, if necessary, to notify the media:

- A. Sewer investigator or response crew verifies overflow and reports back to the Dispatcher.
- B. The Dispatcher informs the Communications Department. The primary contact should be the Communications Coordinator
- C. After hours and weekend SSOs should also be reported to the Communications Department at the numbers listed in *Table VI-1*.
- D. All media requests received should be referred to the Communications Department.
- E. The following personnel are authorized to be interviewed by the media and are the designated spokespersons:
 1. Chief Executive Officer
 2. Chief Administration Officer
 3. Communications Coordinator
 4. Chief Operations Officer

Table VI-1 provides contact names and numbers for the Communications Department.

Table VI-1
Little Rock Wastewater Media Contacts

Contact	Contact Name	Office	Mobile
Primary	John Jarratt, Chief Administration Officer	501.688.1410	501.352.0512
Backup	Kenetta Ridgell, Communications Administrator	501.688.1470	501.442.6431

VII. DISTRIBUTION AND MAINTENANCE OF SSORP

Annual updates to the SSORP reflect all changes in policies and procedures as may be required to achieve its objectives.

A. Submittal and Availability of SSORP

Copies of the SSORP and any amendments are distributed to the following departments and functional positions:

<u>Department</u>	<u>Functional positions</u>
Administration	C.E.O., Chief Administration Officer
Engineering	Director, Engineering
Maintenance	Director, Chief Operating Officer
Operations	Director, Superintendents
EAD	Director

All other personnel who may become incidentally involved in responding to overflows should also be familiarized with the SSORP.

B. Review and Update of SSORP

Review of the SSORP is conducted annually and amended as appropriate.

LRW should:

- Update the SSORP with the issuance of a revised or new NPDES permit or state waste discharge permit;
- Conduct annual training sessions with appropriate personnel; and
- Review and update, as needed, the various contact person lists included in the SSORP.
- Along with the submittal of the annual Consent Administrative Order Report, this SSORP document will be updated and submitted as part of the entire report.

C. Practical Resources

There will be laminated pocket guides printed and furnished to all employees that are involved with the SSO Response Plan, which will provide an overview of the of procedures as well as essential phone numbers. There will also be a quick reference for estimating sewer overflow volumes.

D. Training

Each division will be responsible for training their own personnel. The training should include any employee who is involved in or may possibly be involved in the SSO process. These persons are provided a copy of the SSO Response Plan and said plan will be reviewed in depth with them. This training should take place annually or when revisions occur so that all personnel are brought up to date of any changes that may occur. Each division should also review their response efforts at these annual training sessions and should take suggestions to revise procedures. These suggestions will then be submitted to all divisions for review to determine if the revisions are required.

APPENDIX A. Procedure to Track Sanitary Sewer Overflows

The procedure to track the frequency and location of SSOs will be as defined below:

- A. All SSOs will have a work order prepared within our work order database, which currently is Hansen.
- B. SSOs will be defined as capacity: (SOC = Sewer Overflow Capacity) (SOCP = Sewer Overflow Capacity Private/capacity overflow occurring on privately-owned assets) or non-capacity: (SONC = Sewer Overflow Non-Capacity). The definition of a non-capacity will be one that overflows due to an obstruction in the main line, line failure, or equipment failures. The definition of a capacity related overflow is one that has insufficient carrying capacity to handle inflow and/ or infiltration during a storm event. Engineering shall maintain and update a list of capacity related SSOs. Several other codes have been defined as follows: (SONCO) Sewer Overflow Non-Capacity due to vandalism or contractor damage, (SONCP) = Sewer Overflow Non-Capacity Private / overflow occurring on a privately owned assets)
- C. The work order will also include the asset number to identify the overflow locations, which will always be the upstream manhole number of the sewer main asset. A service number will also be assigned by Dispatch for tracking all associated activities.
- D. Monthly reports will be prepared providing the number of capacity and non-capacity SSOs.
- E. In addition to work order data, information on all reported SSOs will be maintained in an "event" database. The SSO event database (DMR) has been designed to contain all information required for regulatory reporting. Reports generated from the database will have the capability of pulling SSO locations based upon dates, assets and occurrences within a set time frame.
- F. An initial list of reported capacity related SSOs has been developed for inclusion in the Permanent Signage phase of this SSORP. This list shall be maintained and annually updated as conditions and overflow mitigation efforts work to improve capacity related deficiencies in the collection system. The following list, *Table A-1*, contains those SSO sites that are to be equipped with permanent signage.

Table A-1

SSOs Eligible for Permanent Signage

SSO Manhole Number	Sub-Basin Number
-10-B008	60301
2H004	30030
2H017	30040
2H018	30040
2H019	30040
2H064	30030
2H074	30700
2O025	30501
2O026	30501
3I036	30700
3K058	30700
3K061	30700
3N004	30501
3N005	30501
3N007	30501
3N055	30400
4B003	20030
4B005	10090
4L017	20030
4L076	20030
4N013	40030
4N014	40030
4N030	40702
4N089	30501
5C007	11070
5L030	20030

- G. A second list has been developed, and shall be maintained, by Engineering that defines each potential capacity related SSO manhole by its respective Storm Level. Three such levels have been defined for simplicity in tracking the collection system's response to varying rainfall intensities. Storm Level A indicates an event that exceeds one inch of rainfall in a 24-hour period. These SSO manholes are early indicators of the collection system's response to wet weather conditions. The next tier, Level B, consists of SSO manholes that have the propensity to trigger when rainfall amounts exceed the one year or greater frequency, i.e. 3.5 inches over a 24-hour period. The last tier, Level C, are SSO manholes that only trigger in excess of a two year frequency storm event, i.e. 4.1 inches over a 24-hour period. Rainfall amounts, recorded by the SCADA network at various stations throughout the collection system, are continuously reported to the SCADA monitoring stations and to individual computers supported by the SCADA viewing software. Engineering shall be responsible for monitoring existing rainfall conditions and notifying Maintenance when Level A, B and Level C have been reached. The following list, *Table A-2*, provides the known, or suspected, SSO manholes that have the potential to discharge during wet weather events.

Table A-2. Capacity Related SSOs by Storm Level

<u>Storm Level</u>	<u>Status</u>	<u>Manholes</u>	<u>Area</u>
A	Active	0G015	31300
A	Active	0G019	31300
A	Active	0G025	31300
A	Active	0G087	31300
A	Active	-10-B008	60301
A	Active	10I112	10901
A	Active	10L013	20800
A	Active	-1A048	11600
A	Active	1B012	11502
A	Active	1B018	11502
A	Active	1G087	30060
A	Active	2B068	11502
A	Active	2E080	31100
A	Active	2H019	30040
A	Active	2H074	30030
A	Active	2K142	30700
A	Active	2K143	30700
A	Active	2K167	30700
A	Active	2O025	30501
A	Active	2O026	30501
A	Active	2Q021	40703
A	Active	2R026	40703

A	Active	3D065	11501
A	Active	3D108	11501
A	Active	3I036	30700
A	Active	3K058	30700
A	Active	3K061	30700
A	Active	3N004	30501
A	Active	3N005	30501
A	Active	3N007	30501
A	Active	3N055	30400
A	Active	4B003	10090
A	Active	4B005	10090
A	Active	4L017	20030
A	Active	4L076	20030
A	Active	4N013	40030
A	Active	4N014	40030
A	Active	4N030	40702
A	Active	4N080	40702
A	Active	4N089	30501
A	Active	5C007	10070
A	Active	5L030	20030
A	Active	5L051	20030
A	Active	5L052	20030
A	Active	5L067	20030
A	Active	5L068	20030
A	Active	6C047	11400
A	Active	6G012	21303
A	Active	6L011	20030
A	Active	6N009	40701
A	Active	6N016	40701
A	Active	6N077	40701
A	Active	-7A065	60200
A	Active	-7K001	30502
A	Active	7K113	21200
A	Active	-8-A012	60200
A	Active	-8-A015	60200
A	Active	8E049	11101
A	Active	8E114	11101
B	Active	0D104	31700
B	Active	2E085	31100
B	Active	6C006	10080
C	Active	0D034	31700
C	Active	0E011	31700
C	Active	0E053	31700
C	Active	0F146	31700
C	Active	10J009	20700

C	Active	11J053	20402
C	Active	11K107	20700
C	Active	2E066	31100
C	Active	2H004	30030
C	Active	2H017	30040
C	Active	2H018	30040
C	Active	2H064	30030
C	Active	3N006	30501
C	Active	4L013	30300
C	Active	4L015	30300
C	Active	4L019	20030
C	Active	4N019	40702
C	Active	-6K010	30502
C	Active	-6K011	30502
C	Active	6N008	40701
C	Active	-7A053	60200
C	Active	-8-A006	60200
C	Active	8I006	20902
C	Active	10J009	20700
C	Active	11J053	20402
C	Active	11K107	20700
C	Active	1B018	11502

The "status" category provides an indication of the confidence level in the potential for this manhole to experience an SSO. "Active" means a confirmed SSO was experienced, "Investigate" means non-verified information has led to the inclusion on this listing and shall require field conformation, while "Pending" indicates a rehabilitation effort has been conducted with field conformation to follow to conclude positive mitigation. "Subbasin" and "Maintenance Crew Work Area (Maint. Area)" categories are for internal Engineering and Maintenance Department tracking and work area assignment.

- H. An annual report will be prepared by Engineering, which shall include a review of all capacity related overflows, as well as determine updates to the two tables above for permanent signage and potential capacity related SSO manholes. These updated capacity related SSO lists shall be included for amendment to this SSORP.

APPENDIX B. SSO Action Plan

Dispatching Crews

Dispatchers receive notification of possible SSOs from two sources – public and internal crews.

Notification during working hours

Dispatchers receive notification of a possible SSO from the public at which time they collect all relevant information as outlined in Section III-A, which at this point they dispatch one of our Emergency Crews or Area Foreman to the site to verify if an SSO has occurred. The crew will report findings back to Dispatcher.

The Responding Crew determines if an SSO has occurred and attempts to resolve the problem, then contacts the Area Foreman within 1-hour of being notified by dispatcher. The Responding Crew goes to site and takes photographs before clean-up is started and places warning signage at the site as well as at adjacent homes if required and available. The Area Foreman or Supervisor also verifies that the responding crew has filled out an Overflow Report Form and that the required information is on form. The Dispatcher can assist in determining if a red or black Overflow Report Form is the proper form to use when the fate involves a waterway by using the Arc Map database to determine if a drainage area is a named waterway or an unnamed waterway/ditch.

Crews at this point start cleanup and sanitize the site. When complete, the crew is to contact the Area Foreman, who will go back to the site and verify that the cleanup is completed, take after photographs, and remove warning signs.

Notification after hours

The emergency crews receive notification of a possible SSO from the public at which time they collect all relevant information as outlined in Section III-A. and then proceed to the location. (Emergency crew leader manages emergency phone after hours.)

The emergency crew determines if an SSO has occurred, attempts to resolve the problem, takes photographs before cleanup and places warning signs at the site as well as at adjacent homes if required. The crew is to fill out an Overflow Report Form and submit it with their paper work at the beginning of the next workday.

The emergency crew then starts clean-up and sanitizes the site, which, when completed, the crew is to take after photographs and remove warning signs.

If the SSO occurred within a structure the Supervisor is to verify that cleanup has been completed and all policies were followed. A site visit is to be performed no later than the first

work day after the overflow occurrence. The Communications Coordinator will be informed as well to handle any damage claims.

Internal Notification

Personnel in the field who find an SSO are to contact the Dispatcher and provide the relevant information as outlined in Section III-A. The same procedure as shown for public notification under working hours will be used.

Rain events that are one-inch or greater will trigger our crews to investigate possible recurring SSO sites to verify if an overflow has occurred. These crews will be furnished with a list of possible SSO sites (see Table A-2) which has been determined as being locations that have the potential to overflow. The crew will follow the same procedure as outlined under public notification during working hours. When a crew has gone through their list and an SSO was found, they will return to the site to conduct proper cleanup.

Crews will walk lines and open manholes to check for any blockage or surcharged lines before an SSO exists. These crews will use an activity code of **CIWALK** on their dailies for all segments that they walk. The crew will address all stoppages immediately to restore service and will fill out hand written work orders for additional follow-up investigation that will be turned in the following workday. A cleaning work order and a TV inspection are required on ALL main line sections where stoppages are found and where the work has not been performed during the initial investigation. If the crews find an SSO, they follow the same procedure as shown in the "public notification during working hours" section of this document.

Main line blockages will be cleaned within three (3) working days and a follow-up TV inspection is to be completed within an additional two (2) working days. After TV work has been completed, the Collection System Maintenance Supervisor will review the TV video to determine any subsequent appropriate action to prevent re-occurrence.

APPENDIX C. Detecting Potential Explosive or Toxic Conditions

Purpose

To ensure that all affected LRW employees are notified of potential health or safety hazards in the LRW collection system

Procedure

The following procedures must be followed when detecting potential health or safety hazards in the LRW collection system:

Step 1

The LRW employee(s) or crew discovering the potential health or safety hazard must notify dispatch (via radio or by calling 223-1509) or the Safety Department (688-1468 or 688-1466) to report the potential problem.

A. Information included in the report:

1. Name of the employee making the report
2. Street address or location of potential hazard
3. Manhole number (if known)
4. Brief description of findings

B. If the health or safety hazard was reported to dispatch: dispatch should contact the Safety Department and report the above information.

Step 2

The Safety Department will then investigate the report.

Step 3

If the Safety Department confirms the report, the Safety Department will notify dispatch to ALERT all affected field crews via cellphone that the reported area is "Off Limits" until further notified. The Safety Department will notify ALL other affected LRW & CAW department supervisors of the reported area.

Step 4

Dispatch will draft a notice with the location of the ALERTED areas and place a copy on all Safety News Bulletin Boards and backdoors at the LRW Clearwater Complex. Dispatch will also

(continued)

forward a copy of the notice to Safety Department for placement on other Safety News BB's throughout the utility.

Step 5

The Safety Department will notify CAW dispatch of the Potential Hazardous Area.

Step 6

If the investigation suspects a Natural Gas Leak, the Safety Department will contact CenterPoint Energy to report the situation.

Step 7

The Safety Department will keep ALL affected LRW & CAW departments informed of the situation and monitor their (CenterPoint Energy) findings.

Step 8

Once the health or safety hazard has been corrected, the Safety Department will perform a follow-up investigation and when NO HAZARDOUS conditions exist, the Safety Department will remove the Safety ALERT and notify all affected departments.

Step 9

If gasoline, solvents, paint, or other foreign material is suspected and the hazardous area is located in an Industrial/Commercial Area, the Safety Department will contact the Environmental Assessment Department (EAD) and transfer the report for further action. 688-1547

Step 10

Industrial investigations resulting from explosive or toxic conditions will be performed by EAD pretreatment staff members using procedures from the pretreatment procedures manual. Findings will be provided to Safety upon completion of the investigation.

After Hours Reporting

If a hazardous atmosphere is detected after normal working hours, the employee must report the area the next working day prior to his/her normal working hours. After this report is made the process will begin with step one.

APPENDIX D. SSO Flow and Volume Determination

As indicated previously in this SSORP, each SSO that is actively discharging during the investigation phase of this response plan's tasks shall be evaluated for flow and ultimate total volume discharged, each of which is to be included as part of the reporting requirements. The Engineering Department has defined a three tiered flow estimating system that is derived from the reaction of the manhole lid in relation to the flow exiting the collection system. This system is easily field estimated without the need for measuring devices, which in most instances, would fail to achieve a proper signal due to the lack of sufficient depth of flow.

It has been determined that the majority of actively discharging SSOs reported by a response crew would be non-capacity related. Therefore criteria for determining flow should concentrate on these conditions for gravity sewer collection systems. The three-category rating system is outlined below:

➤ **0 – 10 gpm** (gallons per minute)

This rate covers the light discharge experienced in the upper reaches of the collection system, usually with a small number of residential connections. The visual indicator would be a light flow (about the rate of a standard faucet) from around the manhole lid with no visible release of debris or solids and no movement or lifting of the lid itself.

➤ **10 – 100 gpm**

This rate covers the moderate discharge experienced in the lower reaches of the collection system, usually along the larger collector or outfall type sewer mains (typically 10" and larger mains) and in some capacity related SSOs. The visual indicator would be a noticeable flow from around the manhole lid, slight debris or solids release, and a rocking or slight lifting of the manhole lid.

➤ **100 gpm** (greater than 100 gpm)

This rate covers the heavy discharge experienced along the major outfall sewers and larger capacity related SSOs. The visual indicator is the definite release of debris or solids, and the complete lifting or displacement of the manhole lid.

SSO volumes are derived from the above category multiplied by the duration of discharge. If the exact length of discharge is unknown, criteria for determining an estimated time have been established in the Section III-D, Overflow Report.

APPENDIX E. Signage for Overflows

Temporary Signage

The following language shall be used on signs located on existing SSO sites during cleanup and on notices attached to homes adjacent to SSO sites:

NOTICE OF SANITARY SEWER

OVERFLOW

Please avoid contact with this

sanitary sewer facility due to

the possibility of adverse health effects until cleanup can be completed

For Additional Information

Contact 688-1490

Permanent Signage

The following language shall be used on signs located on potential SSO sites that occur more than once in a twelve-month period:

NOTICE OF SANITARY SEWER OVERFLOWS WHICH MAY OCCUR AT THIS LOCATION

Please avoid contact with this

sanitary sewer facility during an

overflow condition due to the

possibility of adverse health effects

until cleanup can be completed

For Additional Information

Contact 688-1490

ATTACHMENT B
NOTICE OF SSO/AVOID CONTACT UNTIL
CLEANUP



Little Rock
Wastewater

NOTICE OF SANITARY SEWER OVERFLOW

Please avoid contact with this
sanitary sewer facility due to
the possibility of adverse health effects
until cleanup can be completed.

For Additional Information
Contact: 688-1490

ATTACHMENT C
DOOR HANDLE NOTICE OF SSO

NOTICE

Dear Customer:

In our increasing efforts to provide you with exceptional service, continue our preventive maintenance program, and eliminate sanitary sewer overflows, our crews are working in your area. We need to gain access to your property to:

- check an existing manhole
- perform routine inspection/maintenance on an existing line or manhole
- grease-related stoppage
- other _____

SORRY WE MISSED YOU PLEASE CONTACT US AT YOUR EARLIEST CONVENIENCE

THANKS

Work Order # _____
or
Line Segment _____

Today's Date: _____


**Little Rock
Wastewater**

www.lrwu.com

You CAN ALSO HELP ...



Eliminate sanitary sewer overflows by enrolling in Little Rock Wastewater's Can the Grease program. This program allows you to receive one grease can and lid, heat-resistant liners, and lots of information - ALL AT NO CHARGE! Upon receiving the grease packer, all you have to do is:

1. Place the heat-resistant liner in the grease can.
2. Pour your leftover cooking grease into the bag and put the lid back on the can.
3. Once the bag is full, take it out and toss it in the trash. Place another liner in the can.

Signing up is easy, too. Just fill out the card below with your name, address, and telephone number, then return it to us.

Name _____

Address _____

Telephone number _____

Please return card to: Little Rock Wastewater

11 Clearwater Drive

Little Rock, AR 72204

501-698-1400

www.lrwu.com

ATTACHMENT D
NOTICE OF SSO WHICH MAY OCCUR AT THIS
LOCATION



A-S-H
1500 W 65th Avenue PK
20-025
#63848 B

Lynn & P.
Water for
Sewer
11111
11111



ATTACHMENT E
NON-CAPACITY RELATED SANITARY SEWER
OVERFLOWS SUMMARY REPORT

LITTLE ROCK WASTEWATER UTILITY
NON-CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
 NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
 NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
 NPDES Permit No. AR0050849

CAUSE(S) OF SSO

CO - Construction
 D - Debris
 E - Equipment Failure
 G - Res. Grease
 GC - Com. Grease
 LF - Line Failure
 RG - Roots & Grease
 RO - Rools
 VA - Vandalism
 HC - Hydro-Clean

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts
 OEHC - Observed or Evidence of Human Contact
 EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order
 EC - Environmental Cleanup
 HC - Hydro Cleaned
 HR - Hand Rodded
 EN - Reporting to Engineering
 PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River
 DI - Ditch
 DR - Drop Inlet
 GR - Ground Surface
 PA - Paved Area
 CB - Contained in Building
 GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	3200 BROWN ST	8K017	01/14/2015	3:20 pm	60	600	VA	NEAH	EC, PN	PA
AF	3200 BROWN ST	8K019	01/14/2015	3:20 pm	60	60	VA	NEAH	EC,WO	PA
AF	33RD. ST. & BROWN ST.	8K016	01/14/2015	3:20 pm	60	60	VA	NEAH	EC, PN	PA
FC	7200 INTERSTATE 30	8P020	03/20/2015	11:30 am	60	180	CO	NEAH	EC, PN, WO	DI
FC	11611 OTTER CREEK SOUTH RD	-3U014	10/23/2015	6:00 pm	60	60	CO	NEAH	EC, EN, PN, WO	DR
AF	1006 LORETTA LN	2F112	11/18/2015	9:45 am	30	300	VA	NEAH	EC, PN	GR
AF	422 N PALM ST	6G063	11/23/2015	9:20 am	45	45	CO	NEAH	EC, EN, PN	PA
AF	32 GLOUCESTER DR	-1C085	11/24/2015	2:00 pm	60	120	CO	NEAH	EC, EN, PN	GR
AF	1006 LORETTA LN	2F112	11/30/2015	9:00 am	60	300	VA	NEAH	EC, PN	DI
AF	56 COACHLIGHT DR	0F146	12/09/2015	8:15 am	30	750	CO	NEAH,OEHC	EC, EN, PN	CR
AF	1006 LORETTA LN	2F112	12/14/2015	9:45 am	60	120	VA	NEAH	EC, PN	GR
AF	1008 LORETTA LN	2F112	12/23/2015	3:00 pm	60	120	VA	NEAH	EC, PN	GR
AF	1006 LORETTA LN	2F112	12/28/2015	10:20 am	60	3,000	VA	NEAH	EC, PN	DI

COUNT of OTHER OVERFLOWS: 13

FC	6 WOODBINE CT	5N003	01/05/2015	1:00 pm	5	5	LF	NEAH	EC, EN, PN, WO	PA
AF	14809 GORGEOUS VIEW TRL	-6K016	01/06/2015	7:30 am	120	120	RO	NEAH	EC, PN, WO	DI
AF	14810 GORGEOUS VIEW TRL	-6K010	01/06/2015	1:50 pm	40	200	RO	NEAH,OEHC	EC, PN, WO	CR
FC	BACKFLOW PREVENTER	7P006	01/07/2015	9:30 am	60	600	RO	NEAH	EC, PN, WO	DI
AF	3 SOUTHBROOK CIR	1G023	01/08/2015	8:15 pm	200	1,000	RO	NEAH	EC, EN, PN, WO	GR
AF	707 WALNUT ST	7F028	01/09/2015	3:50 pm	60	1,200	RO	NEAH	EC, PN, WO	DI
FC	8015 EDWINA DR	2Q035	01/10/2015	1:15 pm	200	3,000	RO	NEAH	EC, EN, PN, WO	DI
FC	8017 EDWINA DR	2Q036	01/10/2015	1:15 pm	200	3,000	RO	NEAH	EC, PN, WO	DI
FC	8015 EDWINA DR	2Q034	01/12/2015	10:00 am	60	120	RO	NEAH	EC, EN, PN	DI

LITTLE ROCK WASTEWATER UTILITY
NON-CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
 NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
 NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
 NPDES Permit No. AR0050849

CAUSE(S) OF SSO

CO - Construction
 D - Debris
 E - Equipment Failure
 G - Res. Grease
 GC - Com. Grease
 LF - Line Failure
 RG - Roots & Grease
 RO - Roots
 VA - Vandalism
 HC - Hydro-Clean

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts
 OEHC - Observed or Evidence of Human Contact
 EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order
 EC - Environmental Cleanup
 HC - Hydro Cleaned
 HR - Hand Rodded
 EN - Reporting to Engineering
 PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River
 DI - Ditch
 DR - Drop Inlet
 GR - Ground Surface
 PA - Paved Area
 CB - Contained in Building
 GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MTN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	5208 W 24TH ST	6J138	01/16/2015	8:36 am	60	60	G	NEAH	EC	GR
AF	5111 B ST	6G006	01/24/2015	7:45 pm	60	120	G	NEAH	EC, PN, WO	DR
AF	7911 W 29TH ST	2K118	01/25/2015	8:40 pm	60	60	RO	NEAH	EC, PN, WO	PA
AF	29 GREATHOUSE BEND DR	3B016	01/27/2015	9:30 am	30	300	RO	NEAH	EC, PN, WO	GR
AF	3901 CEDAR HILL RD	7F080	01/29/2015	11:45 am	60	60	D	NEAH	EC, PN, WO	PA
FC	21 DELLWOOD DR	5N110	02/06/2015	3:36 pm	90	90	RO	NEAH	EC, PN, WO	GR
FC	9310 STARDUST TRL	2S073	02/17/2015	10:30 am	10	600	G	NEAH	EC, WO	GR
FC	15 ARDMORE DR	3O108	02/27/2015	12:20 pm	60	300	RO	NEAH	EC, EN, PN, WO	GR
AF	2416 W DAISY L GATSON BATES	9I028	03/10/2015	8:00 pm	30	30	G	NEAH	EC	DI
AF	RIVER MOUNTAIN RD.	-1A017	03/23/2015	3:20 pm	60	60	LF	NEAH	EC, EN, PN, WO	GR
AF	33 EPERNAY CIR	-15-B033	04/09/2015	11:30 pm	180	360	E	NEAH	EC, PN	DI
AF	1800 LABETTE MANOR DR	1I083	04/23/2015	12:00 am	75	375	RO	NEAH	EC, PN, WO	DI
AF	4206 W MARKHAM ST	7G060	05/14/2015	11:32 am	60	180	RO	NEAH, OEHC	EC, PN, WO	DR
AF	701 N BUCHANAN ST	5F095	05/19/2015	12:30 pm	60	240	RO	NEAH	EC, PN, WO	PA
FC	5403 HALIFAX DR	5P058	06/11/2015	10:35 am	60	120	G	NEAH	EC, PN, WO	GR
FC	5409 HALIFAX DR	5P059	06/11/2015	10:35 am	60	120	G	NEAH	EC, PN, WO	GR
FC	8120 FLINTRIDGE RD	-3Q002	07/20/2015	1:30 pm	60	60	LF	NEAH	EC, EN, WO	DI
AF	316 N MONROE ST	6G028	08/02/2015	12:05 pm	20	20	RO	NEAH	EC, EN, PN, WO	DI
FC	10901 ARCH ST	9U006	08/05/2015	1:15 pm	60	180	E	NEAH	EC, PN	GR
AF	3711 FOXCROFT RD	2C001	08/12/2015	2:30 pm	30	30	LF	NEAH, OEHC	EC, EN, PN	CR
AF	9 SHACKLEFORD PLZ	-2E042	09/08/2015	11:45 am	60	120	D	NEAH	EC, PN, WO	GR
AF	3617 W MARKHAM ST	8G205	09/16/2015	10:15 am	45	225	RO	NEAH	EC, PN	DI
AF	3103 S CHESTER ST	11K115	09/23/2015	4:50 pm	60	60	D	NEAH	EC, PN, WO	PA
FC	24 OLD GLORY CT	5T067	10/21/2015	2:30 pm	60	60	LF	NEAH	EC, EN, PN, WO	DI

**LITTLE ROCK WASTEWATER UTILITY
NON-CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

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NPDES Permit No. AR0050849

CAUSE(S) OF SSO

CO - Construction
D - Debris
E - Equipment Failure
G - Res. Grease
GC - Com. Grease
LF - Line Failure
RG - Roots & Grease
RO - Roots
VA - Vandalism
HC - Hydro-Clean

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts
OEHC - Observed or Evidence of Human Contact
EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order
EC - Environmental Cleanup
HC - Hydro Cleaned
HR - Hand Rodded
EN - Reporting to Engineering
PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River
DI - Ditch
DR - Drop Inlet
GR - Ground Surface
PA - Paved Area
CB - Contained in Building
GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME.	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
FC	7301 GRACE DR	3P032	11/07/2015	12:30 pm	15	15	RO	NEAH	EC, PN, WO	DI
AF	811 N HUGHES ST	4F046	11/09/2015	9:45 am	60	60	RO	NEAH	EC	GR
AF	11073 BAINBRIDGE DR	-2A059	12/03/2015	12:20 pm	30	30	RO	NEAH	EC, PN, WO	GR

COUNT of MANHOLE OVERFLOWS: 36

COUNT of NON-CAPACITY OVERFLOWS : 49

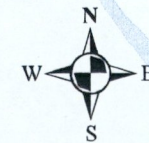
2015 Non - Capacity Related SSO's

Probable Cause

- Construction
- Debris
- Equipment
- Grease
- Line Failure
- Roots
- Vandalism

There were 49 Non-Capacity Related Overflows in 2015

Cause	Occurrences
Construction	5
Debris	3
Equipment	2
Grease	6
Line Failure	5
Roots	20
Vandalism	8



ATTACHMENT F
CAPACITY RELATED SANITARY SEWER
OVERFLOWS SUMMARY REPORT

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

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AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

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GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	3201 WHITFIELD ST	2K167	01/03/2015	10:00 am	30	30	R	NEAH	EC, EN, PN, WO	DI
AF	3501 WHITFIELD ST	3K058	01/03/2015	10:00 am	30	750	R	NEAH	EC, EN, PN, WO	DI
AF	5207 WESTERN HILLS AVE	3N005	01/03/2015	10:00 am	60	180	R	NEAH	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N013	01/03/2015	10:00 am	60	120	R	NEAH	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	01/03/2015	10:00 am	60	240	R	NEAH	EC, EN, PN	CR
AF	7500 W 65TH ST	2O025	01/03/2015	10:00 am	60	180	R	NEAH	EC, EN, PN	CR
AF	9722 W MARKHAM ST	0G019	01/03/2015	10:00 am	30	30	R	NEAH	EC, EN, PN, WO	DI
AF	9722 W MARKHAM ST	0G025	01/03/2015	10:00 am	30	30	R	NEAH	EC, EN, PN, WO	DI
AF	REBSAMEN PARK	5C007	01/03/2015	10:00 am	60	300	R	NEAH	EC, EN, PN, WO	GR
AF	1401 BISCAYNE DR	2E080	02/21/2015	6:00 pm	30	150	R	NEAH	EC, EN, PN, WO	GR
AF	3201 WHITFIELD ST	2K167	02/21/2015	6:00 pm	30	300	R	NEAH	EC, EN, PN, WO	DI
AF	3437 WYNNE ST	2K143	02/21/2015	6:00 pm	10	50	R	NEAH	EC, EN, PN, WO	DI
AF	3501 WHITFIELD ST	3K058	02/21/2015	6:00 pm	30	300	R	NEAH	EC, EN, PN, WO	DI
AF	37 VISTA PT	-7K001	02/21/2015	6:00 pm	60	600	R	NEAH,OEHC	EC, EN, PN	CR
AF	3807 FOXCROFT RD	1B012	02/21/2015	6:00 pm	15	300	R	NEAH	EC, EN, PN, WO	CR
AF	5207 WESTERN HILLS AVE	3N004	02/21/2015	6:00 pm	60	120	R	NEAH	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	02/21/2015	6:00 pm	60	180	R	NEAH	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N013	02/21/2015	6:00 pm	60	180	R	NEAH	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	02/21/2015	6:00 pm	60	180	R	NEAH	EC, EN, PN	CR
AF	7500 W 65TH ST	2O025	02/21/2015	6:00 pm	60	60	R	NEAH,OEHC	EC, EN, PN	CR
FC	7909 MCDANIEL DR	2Q021	02/21/2015	6:00 pm	60	60	R	NEAH	EC, EN, PN	DI
AF	810 PINE VALLEY RD	3D108	02/21/2015	6:00 pm	30	30	R	NEAH	EC, EN, PN, WO	GR
AF	9722 W MARKHAM ST	0G015	02/21/2015	6:00 pm	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	9722 W MARKHAM ST	0G019	02/21/2015	6:00 pm	30	150	R	NEAH	EC, EN, PN, WO	DI

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

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CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

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ULTIMATE DISCHARGE LOC.

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NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	9722 W MARKHAM ST	0G025	02/21/2015	6:00 pm	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	DOWNSTREAM MANHOLE NOT	6G012	02/21/2015	6:00 pm	60	60	R	NEAH	EC, EN, PN	DR
AF	KANIS PARK	2H019	02/21/2015	6:00 pm	30	750	R	NEAH	EC, EN, PN, WO	GR
AF	KANIS PARK	2H074	02/21/2015	6:00 pm	30	300	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK	4B005	02/21/2015	6:00 pm	10	200	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK	5C007	02/21/2015	6:00 pm	15	300	R	NEAH	EC, EN, PN, WO	GR
AF	1420 REBSAMEN PARK RD	8E049	03/10/2015	5:00 am	25	125	R	NEAH	EC, EN, PN, WO	PA
AF	1420 REBSAMEN PARK RD	8E114	03/10/2015	5:00 am	25	125	R	NEAH	EC, EN, PN, WO	PA
AF	1601 WESTPARK DR	3I036	03/10/2015	5:00 am	30	300	R	NEAH	EC, EN, PN, WO	CR
AF	3201 WHITFIELD ST	2K167	03/10/2015	5:00 am	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	3317 WHITFIELD ST	3K061	03/10/2015	5:00 am	30	600	R	NEAH	EC, EN, PN, WO	CR
AF	3437 WYNNE ST	2K143	03/10/2015	5:00 am	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	3501 WHITFIELD ST	3K058	03/10/2015	5:00 am	30	750	R	NEAH	EC, EN, PN, WO	DI
AF	3611 MABELVALE PIKE	6L011	03/10/2015	5:00 am	420	10,500	R	NEAH	EC, EN, PN, WO	DI
AF	37 VISTA PT	-7K001	03/10/2015	5:00 am	60	120	R	NEAH	EC, EN, PN	CR
AF	4701 ASHER AVE	7K113	03/10/2015	5:00 am	30	300	R	NEAH	EC, EN, PN, WO	GR
AF	6801 COLONEL GLENN RD	4L076	03/10/2015	5:00 am	30	450	R	NEAH	EC, EN, PN, WO	CR
AF	9722 W MARKHAM ST	0G019	03/10/2015	5:00 am	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	9722 W MARKHAM ST	0G025	03/10/2015	5:00 am	30	150	R	NEAH	EC, EN, PN, WO	DI
AF	KANIS PARK	2H074	03/10/2015	5:00 am	15	300	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK	4B005	03/10/2015	5:00 am	30	750	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK	5C007	03/10/2015	5:00 am	30	750	R	NEAH	EC, EN, PN, WO	GR
FC	10 S MEADOWCLIFF DR	4N030	03/14/2015	3:00 am	60	60	R	NEAH	EC, EN, PN	GR
AF	1401 BISCAVNE DR	2E080	03/14/2015	3:00 am	15	35	R	NEAH	EC, EN, PN, WO	GR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hvdro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
FC	16 ROSEMOOR DR	6N009	03/14/2015	3:00 am	60	60	R	NEAH	EC, EN, PN	GR
AF	3807 FOXCROFT RD	1B012	03/14/2015	3:00 am	30	300	R	NEAH	EC, EN, PN, WO	CR
AF	3807 FOXCROFT RD	2B068	03/14/2015	3:00 am	30	300	R	NEAH	EC, EN, PN, WO	GR
AF	4111 S UNIVERSITY AVE	5L030	03/14/2015	3:00 am	60	1,500	R	NEAH	EC, EN, PN, WO	GR
AF	5207 WESTERN HILLS AVE	3N055	03/14/2015	3:00 am	30	750	R	NEAH	EC, EN, PN, WO	GR
AF	5423 W 35TH ST	5L051	03/14/2015	3:00 am	15	150	R	NEAH	EC, EN, PN, WO	GR
AF	5423 W 35TH ST	5L052	03/14/2015	3:00 am	30	1,500	R	NEAH	EC, EN, PN, WO	GR
AF	5423 W 35TH ST	5L067	03/14/2015	3:00 am	15	75	R	NEAH	EC, EN, PN, WO	GR
AF	6701 COLONEL GLENN RD	4L017	03/14/2015	3:00 am	20	300	R	NEAH	EC, EN, PN, WO	GR
AF	7500 W 65TH ST	2O025	03/14/2015	3:00 am	30	300	R	NEAH	EC, EN, PN, WO	CR
AF	KANIS PARK	2H019	03/14/2015	3:00 am	30	750	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK	4B003	03/14/2015	3:00 am	30	300	R	NEAH	EC, EN, PN	GR
AF	7500 W 65TH ST	2O025	04/13/2015	10:30 pm	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	3201 WHITFIELD ST	2K167	04/25/2015	2:00 am	30	30	R	NEAH	EC, EN, PN, WO	DI
AF	3317 WHITFIELD ST	3K061	04/25/2015	2:00 am	30	300	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	3501 WHITFIELD ST	3K058	04/25/2015	2:00 am	30	600	R	NEAH	EC, EN, PN, WO	DI
AF	5207 WESTERN HILLS AVE	3N005	04/25/2015	2:00 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N013	04/25/2015	2:00 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	04/25/2015	2:00 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	7500 W 65TH ST	2O025	04/25/2015	2:00 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF		-8-A015	05/11/2015	5:45 am	30	150	R	NEAH	EC, EN, PN	GR
AF	02/21/03 UNABLE TO OPEN LID	1B018	05/11/2015	5:45 am	30	150	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	1 WINDY OAKS CT	0G087	05/11/2015	5:45 am	15	75	R	NEAH	EC, EN, PN, WO	GR
AF	123 BROOKSIDE DR	1G087	05/11/2015	5:45 am	60	60	R	NEAH	EC, EN, PN, WO	DR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	1401 BISCAYNE DR	2E080	05/11/2015	5:45 am	15	75	R	NEAH	EC, EN, PN, WO	GR
FC	16 ROSEMOOR DR	6N009	05/11/2015	5:45 am	60	60	R	NEAH	EC, EN, PN, WO	GR
AF	1601 WESTPARK DR	3I036	05/11/2015	5:45 am	30	150	R	NEAH	EC, EN, PN, WO	GR
AF	1700 BISHOP ST	10I112	05/11/2015	5:45 am	10	50	R	NEAH	EC, EN, PN, WO	GR
FC	19 N MEADOWCLIFF DR	4N030	05/11/2015	5:45 am	60	60	R	NEAH	EC, EN, PN, WO	GR
AF	3 BUCKLAND RD	-10-B008	05/11/2015	5:45 am	30	750	R	NEAH	EC, EN, PN	DI
AF	3201 WHITFIELD ST	2K167	05/11/2015	5:45 am	15	150	R	NEAH	EC, EN, PN, WO	DI
AF	3317 WHITFIELD ST	3K061	05/11/2015	5:45 am	30	300	R	NEAH	EC, EN, PN, WO	DI
AF	3423 WHITFIELD ST	2K142	05/11/2015	5:45 am	15	75	R	NEAH	EC, EN, PN, WO	GR
AF	3437 WYNNE ST	2K143	05/11/2015	5:45 am	15	75	R	NEAH	EC, EN, PN, WO	GR
AF	3501 WHITFIELD ST	3K058	05/11/2015	5:45 am	15	375	R	NEAH	EC, EN, PN, WO	DI
AF	3636 RIVER MOUNTAIN RD.	-1A048	05/11/2015	5:45 am	60	180	R	NEAH	EC, EN, PN	GR
AF	3807 FOXCROFT RD	1B012	05/11/2015	5:45 am	30	600	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	3807 FOXCROFT RD	2B068	05/11/2015	5:45 am	30	300	R	NEAH	EC, EN, PN, WO	GR
AF	5207 WESTERN HILLS AVE	3N004	05/11/2015	5:45 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	05/11/2015	5:45 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N007	05/11/2015	5:45 am	60	120	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N055	05/11/2015	5:45 am	30	750	R	NEAH	EC, EN, PN, WO	GR
FC	5207 WESTERN HILLS AVE	4N013	05/11/2015	5:45 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N014	05/11/2015	5:45 am	60	60	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	05/11/2015	5:45 am	60	240	R	NEAH,OEHC	EC, EN, PN	CR
AF	5516 TULLEY CV	-8-A012	05/11/2015	5:45 am	30	150	R	NEAH	EC, EN, PN	GR
AF	6801 COLONEL GLENN RD	4L076	05/11/2015	5:45 am	30	750	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	708 PINE VALLEY RD	3D065	05/11/2015	5:45 am	30	150	R	NEAH	EC, EN, PN, WO	DI

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
FC	7909 MCDANIEL DR	2Q021	05/11/2015	5:45 am	60	120	R	NEAH	EC, EN, PN, WO	DI
AF	810 PINE VALLEY RD	3D108	05/11/2015	5:45 am	30	150	R	NEAH	EC, EN, PN, WO	GR
AF	9722 W MARKHAM ST	0G019	05/11/2015	5:45 am	15	300	R	NEAH	EC, EN, PN, WO	DI
AF	9722 W MARKHAM ST	0G025	05/11/2015	5:45 am	15	150	R	NEAH	EC, EN, PN, WO	DI
AF	DOWNSTREAM MANHOLE NOT	-7A065	05/11/2015	5:45 am	60	60	R	NEAH	EC, EN, PN, WO	DR
FC	I-30 & DISTRIBUTION DR.	2R026	05/11/2015	5:45 am	60	120	R	NEAH	EC, EN, PN	DI
AF	KANIS PARK	2H019	05/11/2015	5:45 am	30	750	R	NEAH	EC, EN, PN, WO	GR
AF	KANIS PARK	2H074	05/11/2015	5:45 am	15	375	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK RD.	4B003	05/11/2015	5:45 am	15	150	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK RD.	4B005	05/11/2015	5:45 am	15	300	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK RD.	5C007	05/11/2015	5:45 am	15	300	R	NEAH	EC, EN, PN, WO	GR
AF	REBSAMEN PARK RD.	6C047	05/11/2015	5:45 am	60	120	R	NEAH	EC, EN, PN	GR
FC	16 ROSEMOOR DR	6N009	05/20/2015	9:00 am	60	180	R	NEAH	EC, EN, PN, WO	GR
AF	1700 BISHOP ST	10I112	05/20/2015	9:00 am	30	30	R	NEAH	EC, EN, PN, WO	PA
AF	3201 WHITFIELD ST	2K167	05/20/2015	9:00 am	30	30	R	NEAH	EC, EN, PN	DI
AF	3317 WHITFIELD ST	3K061	05/20/2015	9:00 am	30	150	R	NEAH	EC, EN, PN	GR
AF	3423 WHITFIELD ST	2K142	05/20/2015	9:00 am	15	15	R	NEAH	EN, PN	GR
AF	3437 WYNNE ST	2K143	05/20/2015	9:00 am	30	30	R	NEAH	EC, EN, PN	DI
AF	3501 WHITFIELD ST	3K058	05/20/2015	9:00 am	10	250	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N004	05/20/2015	9:00 am	60	120	R	NEAH,OEHC	EC, EN	CR
AF	5207 WESTERN HILLS AVE	3N005	05/20/2015	9:00 am	60	180	R	NEAH,OEHC	EC, EN	CR
FC	5207 WESTERN HILLS AVE	4N013	05/20/2015	9:00 am	60	2,400	R	NEAH,OEHC	EC, EN	CR
AF	5207 WESTERN HILLS AVE	4N089	05/20/2015	9:00 am	60	180	R	NEAH,OEHC	EC, EN	CR
FC	5601 MABELVALE PIKE	4N080	05/20/2015	9:00 am	60	180	R	NEAH	EC, EN, PN, WO	DI

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	6801 COLONEL GLENN RD	4L076	05/20/2015	9:00 am	30	450	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	7500 W 65TH ST	2O026	05/20/2015	9:00 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
FC	7909 MCDANIEL DR	2Q021	05/20/2015	9:00 am	60	180	R	NEAH	EC, EN, PN, WO	DI
FC	BACKWATER FLOW VALVE	6N016	05/20/2015	9:00 am	60	2,400	R	NEAH	EC, EN, PN, WO	DR
FC	I-30 & DISTRIBUTION DR.	2R026	05/20/2015	9:00 am	60	240	R	NEAH	EC, EN, PN, WO	DI
AF	4111 S UNIVERSITY AVE	5L030	05/26/2015	3:00 am	15	750	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L052	05/26/2015	3:00 am	15	75	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L067	05/26/2015	3:00 am	15	75	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L068	05/26/2015	3:00 am	15	150	R	NEAH	EC, EN, PN	GR
FC	7909 MCDANIEL DR	2Q021	07/04/2015	9:00 am	60	120	R	NEAH	EC, EN, PN	DI
AF	02/21/03 UNABLE TO OPEN LID	1B018	11/17/2015	9:00 pm	30	30	R	NEAH,OEHC	EC, EN, PN	CR
AF	123 BROOKSIDE DR	1G087	11/17/2015	9:00 pm	30	150	R	NEAH	EC, EN, PN	GR
AF	1401 BISCAYNE DR	2E080	11/17/2015	9:00 pm	15	150	R	NEAH	EC, EN, PN	GR
AF	14812 GORGEOUS VIEW TRL	-6K011	11/17/2015	9:00 pm	15	75	R	NEAH	EC, EN, PN	GR
FC	16 ROSEMOOR CT	6N009	11/17/2015	9:00 pm	60	120	R	NEAH	EC, EN, PN	GR
AF	1601 WESTPARK DR	3I036	11/17/2015	9:00 pm	30	300	R	NEAH	EC, EN, PN	GR
FC	19 N MEADOWCLIFF DR	4N030	11/17/2015	9:00 pm	60	180	R	NEAH	EC, EN, PN	GR
AF	3 BUCKLAND RD	-10-B008	11/17/2015	9:00 pm	30	600	R	NEAH	EC, EN, PN	DI
AF	3201 WHITFIELD ST	2K167	11/17/2015	9:00 pm	30	450	R	NEAH	EC, EN, PN	DI
AF	3317 WHITFIELD ST	3K061	11/17/2015	9:00 pm	30	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	3423 WHITFIELD ST	2K142	11/17/2015	9:00 pm	15	150	R	NEAH	EC, EN, PN	DI
AF	3437 WYNNE ST	2K143	11/17/2015	9:00 pm	30	150	R	NEAH	EC, EN, PN	DI
AF	3501 WHITFIELD ST	3K058	11/17/2015	9:00 pm	30	600	R	NEAH	EC, EN, PN	DI
AF	38 WESTCHESTER CT	-7A053	11/17/2015	9:00 pm	1,110	5,550	R	NEAH	EC, EN, PN	DI

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
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LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

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ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

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ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

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NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	3807 FOXCROFT RD	1B012	11/17/2015	9:00 pm	10	200	R	NEAH,OEHC	EC, EN, PN	CR
AF	3807 FOXCROFT RD	2B068	11/17/2015	9:00 pm	30	600	R	NEAH	EC, EN, PN	GR
AF	4701 ASHER AVE	7K113	11/17/2015	9:00 pm	60	180	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N004	11/17/2015	9:00 pm	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	11/17/2015	9:00 pm	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N006	11/17/2015	9:00 pm	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N055	11/17/2015	9:00 pm	60	180	R	NEAH,OEHC	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N013	11/17/2015	9:00 pm	60	60	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	11/17/2015	9:00 pm	60	1,800	R	NEAH,OEHC	EC, EN, PN	CR
AF	5512 TULLEY CV	-8-A006	11/17/2015	9:00 pm	15	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	5512 TULLEY CV	-8-A012	11/17/2015	9:00 pm	30	150	R	NEAH	EC, EN, PN	GR
AF	5512 TULLEY CV	-8-A015	11/17/2015	9:00 pm	30	150	R	NEAH	EC, EN, PN	GR
FC	5601 MABELVALE PIKE	4N080	11/17/2015	9:00 pm	60	180	R	NEAH	EC, EN, PN	DI
AF	6801 COLONEL GLENN RD	4L076	11/17/2015	9:00 pm	15	35	R	NEAH,OEHC	EC, EN, PN	CR
AF	708 PINE VALLEY RD	3D065	11/17/2015	9:00 pm	10	50	R	NEAH	EC, EN, PN	DI
FC	7909 MCDANIEL DR	2Q021	11/17/2015	9:00 pm	60	240	R	NEAH	EC, EN, PN	DI
AF	810 PINE VALLEY RD	3D108	11/17/2015	9:00 pm	15	150	R	NEAH	EC, EN, PN	GR
AF	9722 W MARKHAM ST	0G015	11/17/2015	9:00 pm	30	150	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G019	11/17/2015	9:00 pm	30	300	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G025	11/17/2015	9:00 pm	30	300	R	NEAH	EC, EN, PN	DI
FC	BACKWATER FLOW VALVE	6N016	11/17/2015	9:00 pm	60	60	R	NEAH	EC, EN, PN	DR
AF	DOWNSTREAM MANHOLE NOT	-7A065	11/17/2015	9:00 pm	1,100	5,500	R	NEAH	EC, EN, WO	DI
AF	KANIS PARK	2H017	11/17/2015	9:00 pm	15	75	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H018	11/17/2015	9:00 pm	15	75	R	NEAH	EC, EN, PN	GR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

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FC - Fourche Creek Treatment Plant
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AF - Adams Field Treatment Plant
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CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

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ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

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GR - Ground Surface

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NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	KANIS PARK	2H019	11/17/2015	9:00 pm	30	750	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H074	11/17/2015	9:00 pm	30	750	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B005	11/17/2015	9:00 pm	10	200	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	5C007	11/17/2015	9:00 pm	10	200	R	NEAH	EC, EN, PN	GR
AF	02/21/03 UNABLE TO OPEN LID	1B018	11/28/2015	11:20 am	30	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	1 WINDY OAKS CT	0G087	11/28/2015	11:20 am	5	25	R	NEAH	EC, EN, PN	GR
AF	123 BROOKSIDE DR	1G087	11/28/2015	11:20 am	15	300	R	NEAH	EC, EN, PN	GR
AF	1401 BISCAYNE DR	2E080	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	GR
AF	1500 REBSAMEN PARK RD	8E049	11/28/2015	11:20 am	60	3,000	R	NEAH	EC, EN, PN	PA
AF	1500 REBSAMEN PARK RD	8E114	11/28/2015	11:20 am	50	3,000	R	NEAH	EC, EN, PN	PA
FC	16 ROSEMOOR CT	6N009	11/28/2015	11:20 am	60	120	R	NEAH	EC, EN, PN	GR
AF	1601 WESTPARK DR	3I036	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	GR
AF	1700 BISHOP ST	10I112	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	GR
FC	19 N MEADOWCLIFF DR	4N030	11/28/2015	11:20 am	60	240	R	NEAH	EC, EN, PN	GR
AF	3 BUCKLAND RD	-10-B008	11/28/2015	11:20 am	10	500	R	NEAH	EC, EN, PN	DI
AF	3201 WHITFIELD ST	2K167	11/28/2015	11:20 am	15	150	R	NEAH	EC, EN, PN	DI
AF	3317 WHITFIELD ST	3K061	11/28/2015	11:20 am	30	300	R	NEAH	EC, EN, PN	DI
AF	3423 WHITFIELD ST	2K142	11/28/2015	11:20 am	15	150	R	NEAH	EC, EN, PN	DI
AF	3437 WYNNE ST	2K143	11/28/2015	11:20 am	30	300	R	NEAH	EC, EN, PN	DI
AF	3501 WHITFIELD ST	3K058	11/28/2015	11:20 am	30	750	R	NEAH	EC, EN, PN	DI
AF	3611 MABELVALE PIKE	6L011	11/28/2015	11:20 am	30	750	R	NEAH	EC, EN, PN	DI
AF	38 WESTCHESTER CT	-7A053	11/28/2015	11:20 am	60	6,000	R	NEAH	EC, EN, PN	GR
AF	3807 FOXCROFT RD	1B012	11/28/2015	11:20 am	30	600	R	NEAH,OEHC	EC, EN, PN	CR
AF	3807 FOXCROFT RD	2B068	11/28/2015	11:20 am	30	600	R	NEAH	EC, EN, PN	GR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

CODE DESCRIPTIONS

NPDES PERMIT

FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

NEAH - No Evidence of Adverse Health or Environmental Impacts

OEHC - Observed or Evidence of Human Contact

EFK - Evidence of Fish Kill

ACTION(S) TAKEN

WO - Work Order

EC - Environmental Cleanup

HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

ULTIMATE DISCHARGE LOC.

CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MTN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	4111 S UNIVERSITY AVE	5L030	11/28/2015	11:20 am	30	1,500	R	NEAH	EC, EN, PN	GR
AF	4400 S UNIVERSITY AVE	4L015	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	GR
AF	4701 ASHER AVE	7K113	11/28/2015	11:20 am	15	375	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N004	11/28/2015	11:20 am	60	240	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	11/28/2015	11:20 am	60	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N007	11/28/2015	11:20 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N055	11/28/2015	11:20 am	30	600	R	NEAH	EC, EN, PN	GR
FC	5207 WESTERN HILLS AVE	4N013	11/28/2015	11:20 am	60	240	R	NEAH,OEHC	EC, EN	CR
AF	5207 WESTERN HILLS AVE	4N089	11/28/2015	11:20 am	60	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	5423 W 35TH ST	5L051	11/28/2015	11:20 am	30	300	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L052	11/28/2015	11:20 am	30	750	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L067	11/28/2015	11:20 am	10	50	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L068	11/28/2015	11:20 am	30	750	R	NEAH	EC, EN, PN	GR
AF	5512 TULLEY CV	-8-A006	11/28/2015	11:20 am	30	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	5512 TULLEY CV	-8-A012	11/28/2015	11:20 am	30	150	R	NEAH	EC, EN, PN	GR
AF	5512 TULLEY CV	-8-A015	11/28/2015	11:20 am	30	150	R	NEAH	EC, EN, PN	GR
FC	5601 MABELVALE PIKE	4N080	11/28/2015	11:20 am	60	120	R	NEAH	EC, EN, PN	DI
AF	6401 COLONEL GLENN RD	4L017	11/28/2015	11:20 am	30	300	R	NEAH	EC, EN, PN	GR
AF	6801 COLONEL GLENN RD	4L076	11/28/2015	11:20 am	30	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	708 PINE VALLEY RD	3D065	11/28/2015	11:20 am	10	50	R	NEAH	EC, EN, PN	DI
AF	7500 W 65TH ST	2O025	11/28/2015	11:20 am	60	240	R	NEAH,OEHC	EC, EN, PN	CR
AF	7500 W 65TH ST	2O026	11/28/2015	11:20 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
FC	7909 MCDANIEL DR	2Q021	11/28/2015	11:20 am	60	180	R	NEAH	EC, EN, PN	DI
AF	810 PINE VALLEY RD	3D108	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	GR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

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FC - Fourche Creek Treatment Plant
NPDES Permit No. AR0040177

AF - Adams Field Treatment Plant
NPDES Permit No. AR0021806

LM - Little Maumelle Treatment Plant
NPDES Permit No. AR0050849

CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

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EFK - Evidence of Fish Kill

ACTION(S) TAKEN

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HC - Hydro Cleaned

HR - Hand Rodded

EN - Reporting to Engineering

PN - Public Notification

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CR - Creek/Stream/River

DI - Ditch

DR - Drop Inlet

GR - Ground Surface

PA - Paved Area

CB - Contained in Building

GR/CB - Building and Ground

NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	9722 W MARKHAM ST	0G015	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G019	11/28/2015	11:20 am	15	75	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G025	11/28/2015	11:20 am	15	150	R	NEAH	EC, EN, PN	DI
FC	BACKWATER FLOW VALVE	6N016	11/28/2015	11:20 am	60	180	R	NEAH	EC, EN, PN	DR
AF	DOWNSTREAM MANHOLE NOT	-7A065	11/28/2015	11:20 am	60	3,000	R	NEAH	EC, EN, PN	GR
FC	INTERSTATE 30	2R026	11/28/2015	11:20 am	60	120	R	NEAH	EC, EN, PN	DI
AF	Kanis Park	2H004	11/28/2015	11:20 am	15	150	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	Kanis Park	2H064	11/28/2015	11:20 am	15	150	R	NEAH,OEHC	EC, EN, PN, WO	CR
AF	KANIS PARK	2H017	11/28/2015	11:20 am	30	150	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H018	11/28/2015	11:20 am	30	600	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H019	11/28/2015	11:20 am	60	1,500	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H074	11/28/2015	11:20 am	30	150	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B003	11/28/2015	11:20 am	15	150	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B005	11/28/2015	11:20 am	15	300	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	5C007	11/28/2015	11:20 am	15	300	R	NEAH	EC, EN, PN	GR
AF	W. 15TH ST. & MAPLE ST.	8I006	11/28/2015	11:20 am	60	180	R	NEAH	EC, EN, PN	DR
AF	5207 WESTERN HILLS AVE	4N089	12/13/2015	11:00 am	60	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	1401 BISCAYNE DR	2E080	12/13/2015	9:00 pm	5	25	R	NEAH	EC, EN, PN	GR
AF	1601 WESTPARK DR	3I036	12/13/2015	9:00 pm	15	150	R	NEAH	EC, EN, PN	GR
AF	3201 WHITFIELD ST	2K167	12/13/2015	9:00 pm	10	50	R	NEAH	EC, EN, PN	DI
AF	3317 WHITFIELD ST	3K061	12/13/2015	9:00 pm	15	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	3409 S BATTERY ST	10L013	12/13/2015	9:00 pm	60	240	R	NEAH	EC, EN, PN	GR
AF	3423 WHITFIELD ST	2K142	12/13/2015	9:00 pm	20	20	R	NEAH	EC, EN, PN	GR
AF	3437 WYNNE ST	2K143	12/13/2015	9:00 pm	10	50	R	NEAH	EC, EN, PN	GR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

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CAUSE(S) OF SSO

R - Rainfall

OBSERVED ENVIRONMENTAL IMPACT

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AF	3501 WHITFIELD ST	3K058	12/13/2015	9:00 pm	30	750	R	NEAH	EC, EN, PN	DI
AF	5207 WESTERN HILLS AVE	3N004	12/13/2015	9:00 pm	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	12/13/2015	9:00 pm	60	2,400	R	NEAH,OEHC	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N013	12/13/2015	9:00 pm	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	7500 W 65TH ST	2O025	12/13/2015	9:00 pm	60	240	R	NEAH,OEHC	EC, EN, PN	CR
FC	7909 MCDANIEL DR	2Q021	12/13/2015	9:00 pm	60	180	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G019	12/13/2015	9:00 pm	15	75	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G025	12/13/2015	9:00 pm	15	75	R	NEAH	EC, EN, PN	DI
AF	KANIS PARK	2H019	12/13/2015	9:00 pm	60	180	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H074	12/13/2015	9:00 pm	15	150	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B005	12/13/2015	9:00 pm	15	300	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	5C007	12/13/2015	9:00 pm	15	300	R	NEAH	EC, EN, PN	GR
AF	02/21/03 UNABLE TO OPEN LID	1B018	12/28/2015	7:00 am	30	750	R	NEAH,OEHC	EC, EN, PN	CR
AF	1 WINDY OAKS CT	0G087	12/28/2015	7:00 am	30	30	R	NEAH	EC, EN, PN	GR
AF	123 BROOKSIDE DR	1G087	12/28/2015	7:00 am	10	200	R	NEAH	EC, EN, PN	GR
AF	1317 W 23RD ST	10J009	12/28/2015	7:00 am	60	120	R	NEAH	EC, EN, PN	DI
AF	1401 BISCAVNE DR	2E080	12/28/2015	7:00 am	15	75	R	NEAH	EC, EN, PN	GR
FC	16 ROSEMOOR CT	6N009	12/28/2015	7:00 am	60	180	R	NEAH	EC, EN, PN	GR
AF	1601 WESTPARK DR	3I036	12/28/2015	7:00 am	15	300	R	NEAH,OEHC	EC, EN, PN	CR
AF	1700 BISHOP ST	10I112	12/28/2015	7:00 am	30	30	R	NEAH	EC, EN, PN	GR
FC	19 N MEADOWCLIFF DR	4N030	12/28/2015	7:00 am	60	240	R	NEAH	EC, EN, PN	GR
AF	3 BUCKLAND RD	-10-B008	12/28/2015	7:00 am	60	180	R	NEAH	EC, EN, PN	DI
AF	3201 WHITFIELD ST	2K167	12/28/2015	7:00 am	15	150	R	NEAH	EC, EN, PN	DI
AF	3317 WHITFIELD ST	3K061	12/28/2015	7:00 am	15	300	R	NEAH,OEHC	EC, EN, PN	CR

**LITTLE ROCK WASTEWATER UTILITY
CAPACITY SANITARY SEWER OVERFLOW REPORT
1/1/2015 - 12/31/2015**

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CAUSE(S) OF SSO

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AF	3423 WHITFIELD ST	2K142	12/28/2015	7:00 am	15	75	R	NEAH	EC, EN, PN	DI
AF	3437 WYNNE ST	2K143	12/28/2015	7:00 am	15	75	R	NEAH	EC, EN, PN	DI
AF	3501 WHITFIELD ST	3K058	12/28/2015	7:00 am	15	375	R	NEAH	EC, EN, PN	DI
AF	3611 MABELVALE PIKE	6L011	12/28/2015	7:00 am	15	375	R	NEAH	EC, EN, PN	DI
AF	3807 FOXCROFT RD	1B012	12/28/2015	7:00 am	30	750	R	NEAH,OEHC	EC, EN, PN	CR
AF	3807 FOXCROFT RD	2B068	12/28/2015	7:00 am	30	300	R	NEAH	EC, EN, PN	GR
AF	4111 S UNIVERSITY AVE	5L030	12/28/2015	7:00 am	30	1,500	R	NEAH	EC, EN, PN	GR
AF	42 WESTCHESTER CT	-7A053	12/28/2015	7:00 am	5	25	R	NEAH	EC, EN, PN	GR
AF	4400 S UNIVERSITY AVE	4L013	12/28/2015	7:00 am	15	375	R	NEAH,OEHC	EC, EN, PN	CR
AF	4701 ASHER AVE	7K113	12/28/2015	7:00 am	15	375	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N004	12/28/2015	7:00 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N005	12/28/2015	7:00 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	3N007	12/28/2015	7:00 am	60	180	R	NEAH	EC, EN, PN	GR
AF	5207 WESTERN HILLS AVE	3N055	12/28/2015	7:00 am	45	1,125	R	NEAH	EC, EN, PN	GR
FC	5207 WESTERN HILLS AVE	4N013	12/28/2015	7:00 am	60	180	R	NEAH,OEHC	EC, EN, PN	CR
FC	5207 WESTERN HILLS AVE	4N014	12/28/2015	7:00 am	60	120	R	NEAH,OEHC	EC, EN, PN	CR
AF	5207 WESTERN HILLS AVE	4N089	12/28/2015	7:00 am	60	240	R	NEAH,OEHC	EC, EN, PN	CR
AF	5423 W 35TH ST	5L051	12/28/2015	7:00 am	15	75	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L052	12/28/2015	7:00 am	30	750	R	NEAH	EC, EN, PN	GR
AF	5423 W 35TH ST	5L068	12/28/2015	7:00 am	30	300	R	NEAH	EC, EN, PN	GR
AF	5512 TULLEY CV	-8-A015	12/28/2015	7:00 am	10	50	R	NEAH	EC, EN, PN	GR
AF	56 COACHLIGHT DR	0F146	12/28/2015	7:00 am	30	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	6401 COLONEL GLENN RD	4L017	12/28/2015	7:00 am	15	375	R	NEAH	EC, EN, PN	GR
AF	6801 COLONEL GLENN RD	4L076	12/28/2015	7:00 am	30	300	R	NEAH,OEHC	EC, EN, PN	CR

**LITTLE ROCK WASTEWATER UTILITY
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1/1/2015 - 12/31/2015**

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NPDES PERMIT	LOCATION	MANHOLE NO.	DATE OF SSO	TIME OF SSO	ESTIMATED DURATION, MIN	ESTIMATED VOLUME	CAUSE OF SSO	OBSERVED ENVIRON. IMPACT	ACTION(S) TAKEN TO ADDRESS SSO	ULTIMATE DISCHARGE LOCATION
AF	708 PINE VALLEY RD	3D065	12/28/2015	7:00 am	15	150	R	NEAH	EC, EN, PN	DI
FC	7909 MCDANIEL DR	2Q021	12/28/2015	7:00 am	60	120	R	NEAH	EC, EN, PN	DI
FC	8 N MEADOWCLIFF CIR	4N019	12/28/2015	7:00 am	20	100	R	NEAH	EC, EN, PN	GR
AF	8002 ILLINOIS ST	2E066	12/28/2015	7:00 am	10	50	R	NEAH	EC, EN, PN	GR
AF	810 PINE VALLEY RD	3D108	12/28/2015	7:00 am	15	300	R	NEAH	EC, EN, PN	GR
AF	9722 W MARKHAM ST	0G015	12/28/2015	7:00 am	5	50	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G019	12/28/2015	7:00 am	5	50	R	NEAH	EC, EN, PN	DI
AF	9722 W MARKHAM ST	0G025	12/28/2015	7:00 am	5	50	R	NEAH	EC, EN, PN	DI
FC	BACKWATER FLOW VALVE	6N016	12/28/2015	7:00 am	60	120	R	NEAH	EC, EN, PN	DR
AF	DOWNSTREAM MANHOLE NOT	-7A065	12/28/2015	7:00 am	15	75	R	NEAH	EC, EN, PN	GR
FC	INTERSTATE-30	2R026	12/28/2015	7:00 am	60	120	R	NEAH	EC, EN, PN	DI
AF	KANIS PARK	2H004	12/28/2015	7:00 am	30	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	KANIS PARK	2H017	12/28/2015	7:00 am	10	20	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H018	12/28/2015	7:00 am	10	20	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H019	12/28/2015	7:00 am	30	750	R	NEAH	EC, EN, PN	GR
AF	KANIS PARK	2H064	12/28/2015	7:00 am	30	150	R	NEAH,OEHC	EC, EN, PN	CR
AF	KANIS PARK	2H074	12/28/2015	7:00 am	30	600	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B003	12/28/2015	7:00 am	15	375	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	4B005	12/28/2015	7:00 am	15	300	R	NEAH	EC, EN, PN	GR
AF	REBSAMEN PARK	5C007	12/28/2015	7:00 am	15	300	R	NEAH	EC, EN, PN	GR
AF	W. 22ND ST. & CHESTER ST.	11J053	12/28/2015	7:00 am	60	120	R	NEAH	EC, EN, PN	PA

COUNT of CAPACITY OVERFLOWS : 309



Little Rock Wastewater

2015 Capacity Related SSO's

Locations	Occurrences per Locations	Total LRW Capacity SSO's
14	1	14
8	2	16
12	3	36
14	4	56
4	5	20
5	6	30
6	7	42
6	8	48
3	9	27
2	10	20
74	Year-2015	309

SSO Locations
Occurrences per Location

Count

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

