



North Little Rock Wastewater

P. O. Box 17898, North Little Rock, AR 72117-0898



2018 End of Year Report

Consent Administrative Order LIS 10-218

CLOSED



PREFACE

North Little Rock Wastewater (NLRW) was granted closure of CAO LIS 10-218 on November 5, 2018, having demonstrated significant reductions in Sanitary Sewer Overflows and having established a program of continuous improvement and maintenance of its collection system. Due to these ongoing improvements, NLRW is pleased to continue submittal of annual reports until February 1, 2021.

North Little Rock Wastewater 2018 End of Year Report

Consent Administrative Order LIS 10-218 Closed

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North Little Rock Wastewater

2018 End of Year Report

Consent Administrative Order LIS 10-218
Closed

Attn: Alan Anderson, Enforcement Analyst
Water Enforcement Division
Arkansas Department of Environmental Quality

In accordance with the request to continue submitting annual reports following closure of CAO LIS 10-218 until February 1, 2021, North Little Rock Wastewater has completed the 2018 End of Year Report.

1. Wastewater Master Plan

A. Milestone Schedule

<u>Date</u>	<u>Milestone</u>
• Feb. 1, 2011	First Annual Report due
• Feb. 10, 2011	Effective date of Order
• Mar 10, 2011	Cross Connection Certification due
• Mar. 10, 2011	First Penalty Payment due (\$4,375.00)
• Apr. 25, 2011 – Feb. 25, 2013	Monthly Penalty Payment due (\$4,375.00/Mo.)
• Feb. 1, 2012 – Feb. 1, 2021 Or until closure of this CAO	Annual Report due

B. Capital Improvements Plan (CIP)

Following is a listing of projects scheduled or completed as part of the Capital Improvements Plan recommendations from the 2011 Master Plan indicating progress made to date.

i. Treatment Plant Projects

FACILITY	PROJECT NAME	\$	% COMPLETE	DATE
Faulkner Lake	Modifications to Influent Pump Station	\$2,106,883	100%	5/18/2014
Faulkner Lake	Phase III STP Modifications	\$3,554,543	100%	12/1/2015
Five-Mile Creek	Wastewater Treatment Plant Modifications 2013	\$5,343,313	100%	7/14/2014
Faulkner Lake	Maintenance and Emergency Equipment Storage Facilities	\$616,227	100%	9/12/2014
TOTAL \$		\$11,620,966		

ii. Pipeline Rehabilitation Projects

PROJECT NAME	METHOD	LINEAL FT	\$	% COMPLETE	DATE
Baring Cross Basin CIPP 2016 Rehabilitation	CIPP	22,925	\$1,808,523	100%	11/17/18
Baring Cross Basin Pipe Bursting 2016 Rehabilitation	Pipe Bursting	51,026	\$4,137,738	100%	10/01/18
W. Levy/212 Basin CIPP 2016 Rehabilitation	CIPP	23,987	\$1,383,427	90%	12/31/18
W. Levy/212 Basin Pipe Bursting 2016 Rehabilitation	Pipe Bursting	28,698	\$1,634,267	91%	12/31/18
Lower Riverside Interceptor	CIPP/SL	4,345	\$4,400,000	Design	12/31/18
South Levy/Indian Hills CIPP 2017 Rehabilitation	CIPP	49,153	\$2,882,300	Under Contract	12/31/18
South Levy/Indian Hills Pipe Bursting 2017 Rehabilitation	Pipe Bursting	39,108	\$3,585,300	Under Contract	12/31/18
TOTAL		219,242	\$19,831,555		

iii. Pump Station Projects

PROJECT NAME	\$	% COMPLETE	DATE
Shillcutt Pump Station Modifications	\$5,166,843	100%	10/23/14
2013 Auxiliary Generators and Transfer Switches	\$392,922	100%	07/23/14
2014 Auxiliary Generators and Transfer Switches	\$191,995	100%	12/31/14
Oakbrook/Manor Drive Pump Station Upgrade	\$11,392	100%	08/01/16
3306 E. 10th Street Pump Station and Force Main	\$369,713	100%	12/31/17
2017 Auxiliary Generators & Transfer Switches	\$286,411	100%	12/31/17
2018 Auxiliary Generators & Transfer Switches	\$193,056	Bid Award	11/21/18
TOTAL \$	\$6,612,332		

iv. Miscellaneous Gravity Collection Improvements

The Capital Improvements Plan included a line item for miscellaneous gravity system improvements. These are projects identified during the flow monitoring and hydraulic modeling phases of the Masterplan. Staff identified the projects with the highest priority as follows.

PROJECT NAME	\$	% COMPLETE	DATE
Sediment Removal (FL-P1-SR)	\$290,000	0%	12/31/17
Cedar Street Sewer Improvements	\$220,000	*	12/31/17
Gravity Pipe Replacement (FL-GS02)	\$1,300,000	0%	12/31/17
Gravity Pipe Replacement (FL-GS03)	\$1,100,000	0%	12/31/17
White Oak Interceptor Phase II	<u>\$4,796,835</u>	100%	12/31/17
TOTAL \$ \$7,706,835			
<i>* Will be started following final stabilization of the landslide by others.</i>			

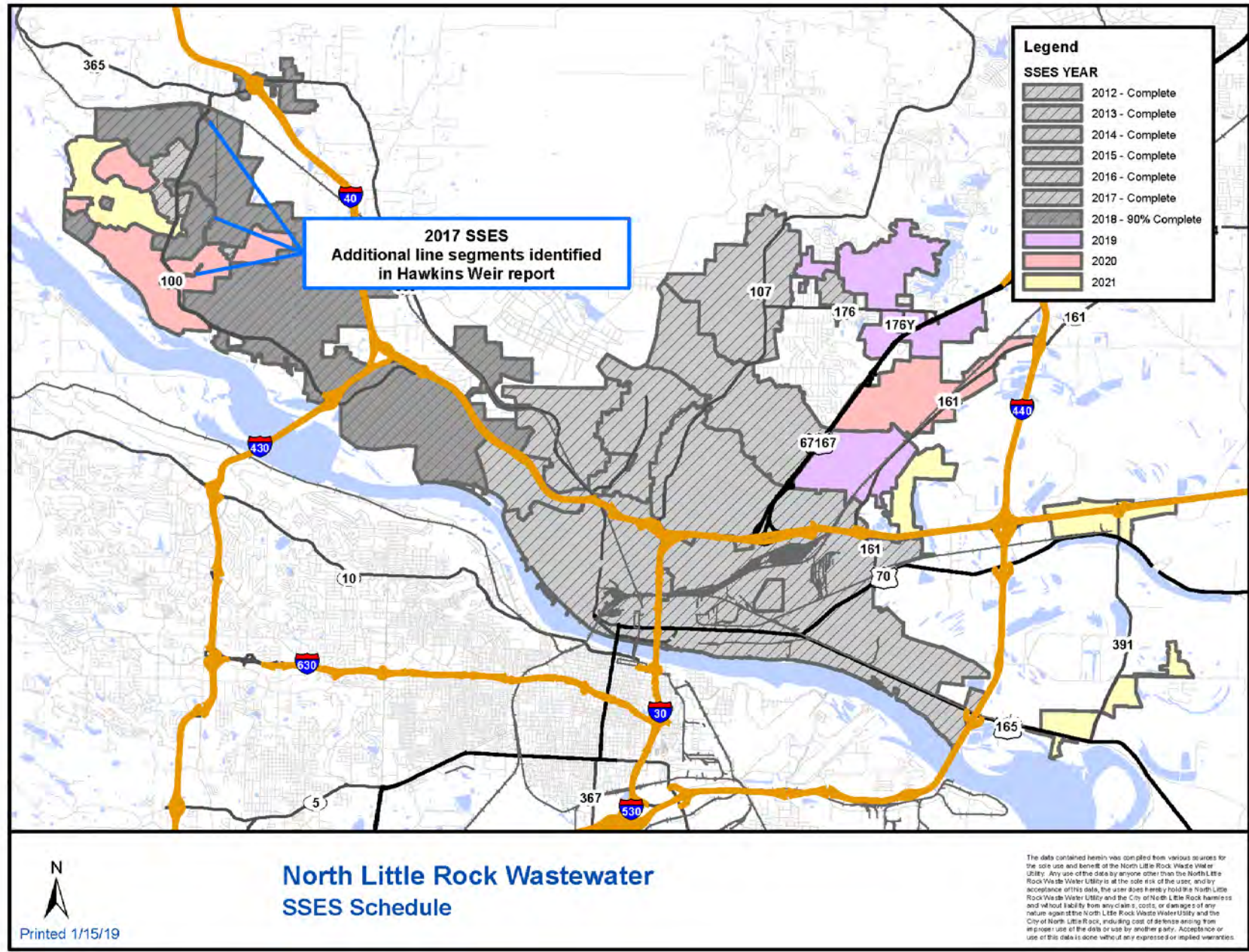
C. Sewer System Evaluation Survey (SSES)

Following is a summary of SSES fieldwork completed to date.

SUMMARY OF SSES FIELDWORK										
Project Name	Smoke Testing			Manhole Inspections			Dye Testing			CCTV
	Quantity (LF)	Defects (EA)	I/I (mgd)	Quantity (EA)	Defects (EA)	I/I (mgd)	Quantity (EA)	Defects (EA)	I/I (mgd)	Quantity (L/F)*
2012 SSES (Levy Area)	205,569	256	0.539	571	633	0.354	50	42	1.567	276,870
2013 SSES (Lakewood Area)	308,152	945	0.625	641	566	0.351	64	49	0.843	229,503
2014 SSES (Baring Cross and Oakbrook SID)	340,896	1,238	2.424	1,636	1,515	0.846	81	70	2.42	317,521
2015 SSES (West Levy and District 212)	378,056	585	0.74	1,762	1,546	0.958	56	30	0.835	544,811
2016 SSES (S Levy, Indian Hills and Dixie)	385,530	499	0.442	1,763	2,187	1.448	33	24	0.271	437,809
2017 SSES (Rose City)	450,144	589	1.284	1,993	4,019	1.348	44	39	0.499	483,594
2018 SSES (Maumelle/White Oak)	443,432			2,129			45			
* System Wide	2,511,779	4,112	6.054	10,495	10,466	5.305	373	254	6.435	2,290,108

PROJECT NAME	\$	% COMPLETE	DATE
SSES 2012	\$275,543	100%	7/2013
SSES 2013	\$457,098	100%	6/2014
SSES 2014	\$486,133	100%	3/2015
SSES 2015	\$534,621	100%	3/2016
SSES 2016	\$549,062	100%	2/2017
SSES 2017	\$679,258	100%	12/2017
SSES 2018	<u>\$710,853</u>	85%	12/2018
TOTAL	\$3,692,568		

Following is a map delineating the schedule of SSES fieldwork.

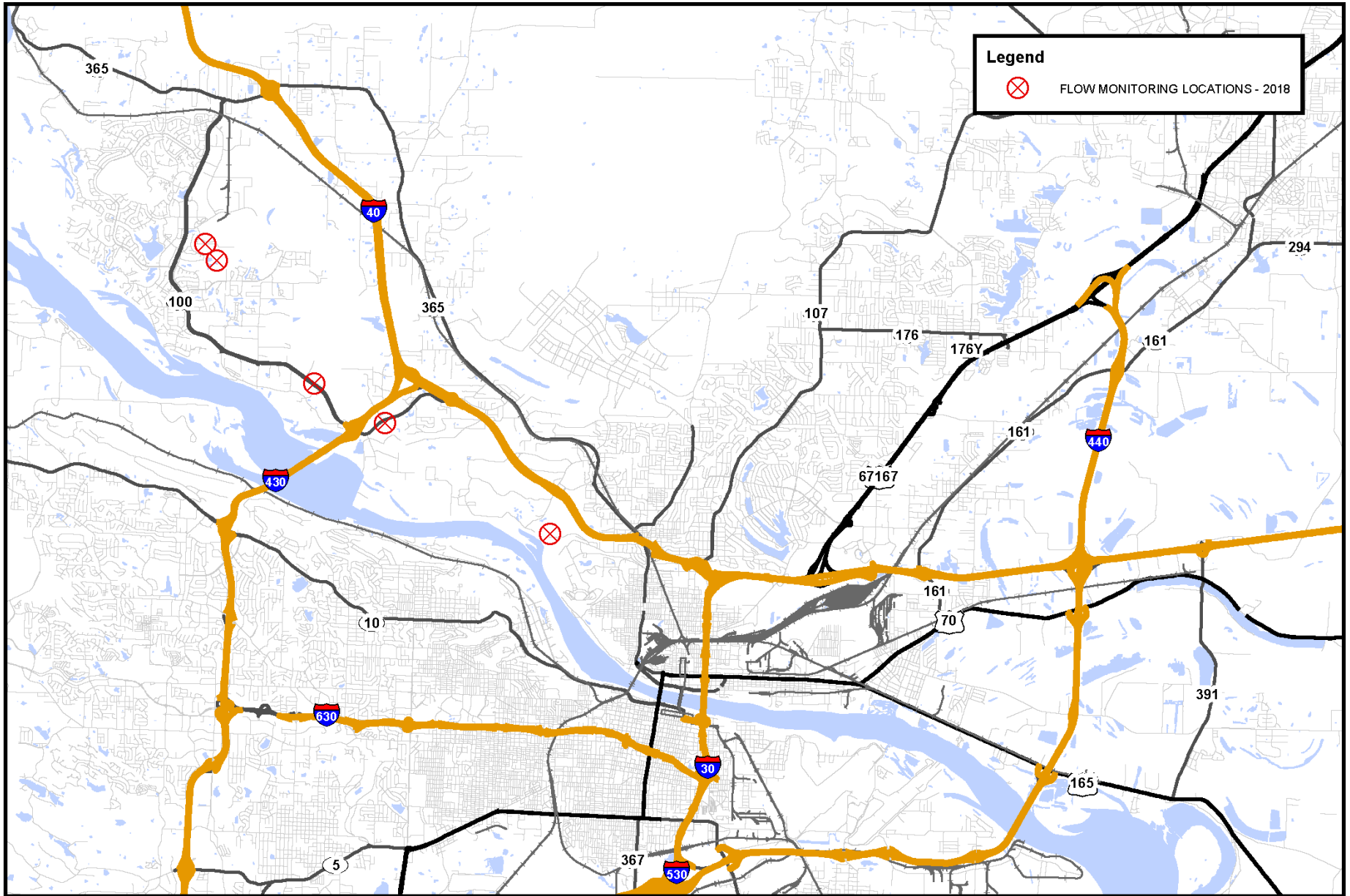


D. SSES, Pumping Station, Capacity Assessment, and Hydraulic Model Evaluation Report

The Masterplan 2011 included a “Capacity, Management, Operations, and Maintenance Self-Assessment Report”, “Flow Monitoring “, and “Hydraulic Model” of the North Little Rock Wastewater Utility’s facilities. This information, along with staff input, was used to develop the capital improvements plan.

NLRW’s geographical information system has been utilized to subdivide the collection system into sub-basins or “sewersheds” of manageable size. SSO data for non-capacity related overflows is being used to focus the Utility’s cleaning efforts to the sewersheds with the highest number of non-capacity related overflows.

The following map (Flow Monitoring Locations) documents the efforts to collect flow data prior to and after completion of rehabilitation projects during the calendar year.



Legend

⊗ FLOW MONITORING LOCATIONS - 2018



North Little Rock Wastewater Flow Monitoring Locations - 2018

Printed 1/13/19

The data contained herein was compiled from various sources for the sole use and benefit of the North Little Rock Waste Water Utility. Any use of the data by anyone other than the North Little Rock Waste Water Utility is at the sole risk of the user, and by acceptance of this data, the user does hereby hold the North Little Rock Waste Water Utility and the City of North Little Rock harmless and without liability from any claim, costs, or damages of any nature against the North Little Rock Waste Water Utility and the City of North Little Rock, including cost of defense arising from improper use of the data or use by another party. Acceptance or use of this data is done without any expressed or implied warranties.

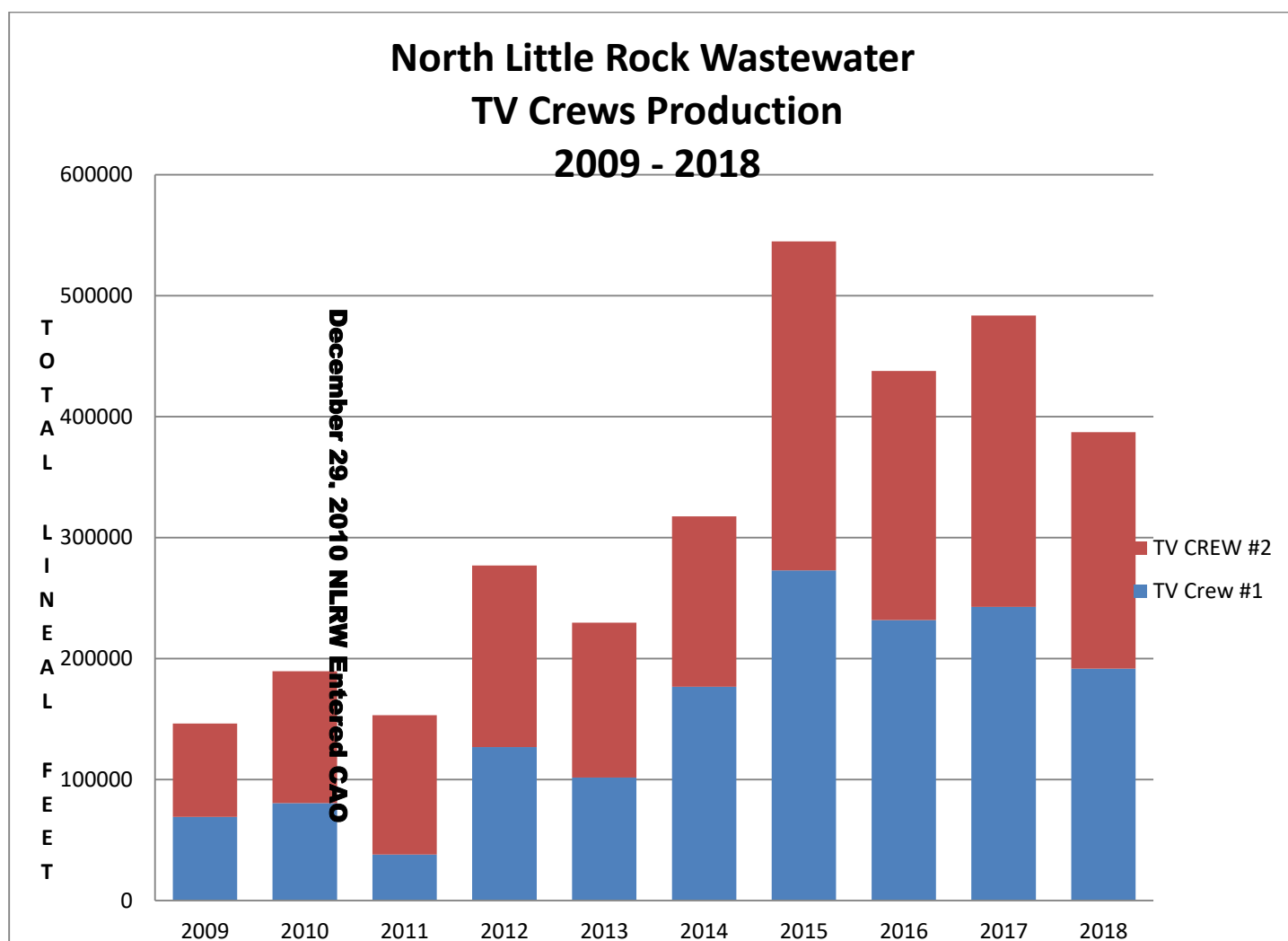
E. Collection System and Wastewater Treatment Plant Remedial Measures Plan

Following is an update of progress on specific collection system and WWTP Remedial Measures:

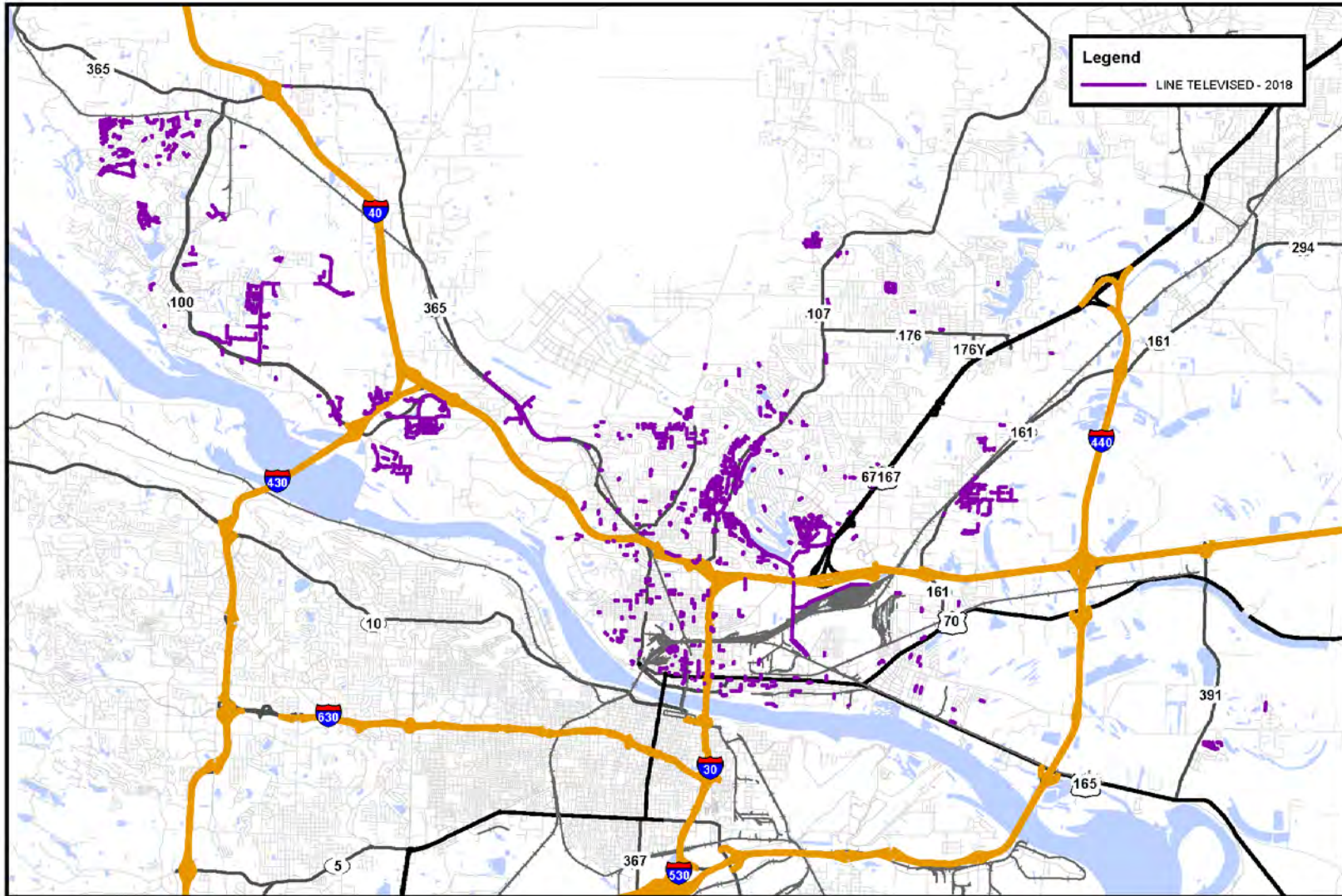
The remedial measures plan generally consists of measures involving existing equipment, personnel and practices which can be modified to reduce the occurrence of SSOs.

i. Increase production of TV and cleaning crews

- a. The following graph and map document the efforts to increase production of the TV crews in targeted areas.



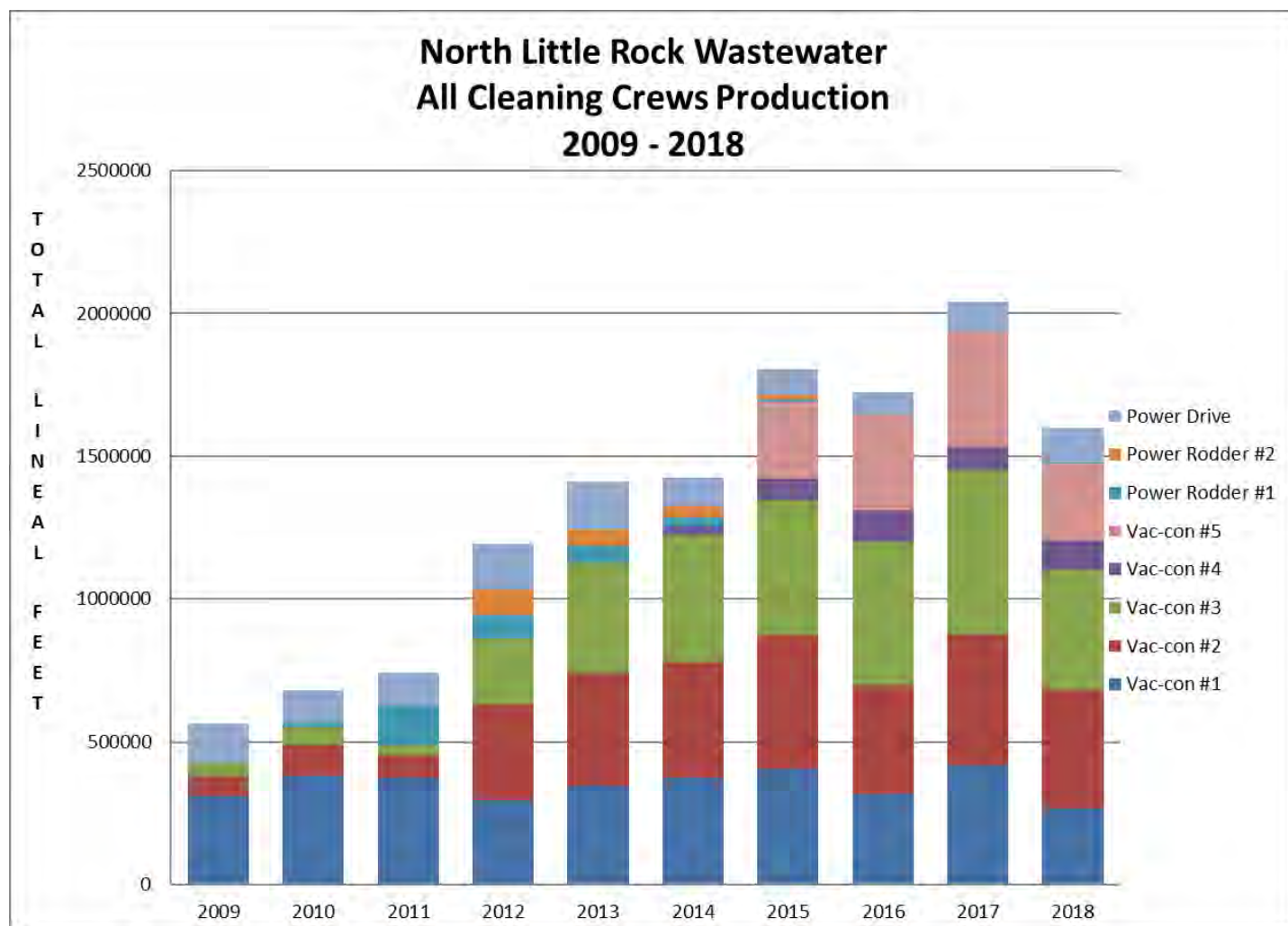
NOTE: On October 29, 2018 both of the Utility's CCTV vans were destroyed in a fire at the Faulkner Lake Water Reclamation Facility. Both units have been replaced, and new units were put in service on December 26, 2018.



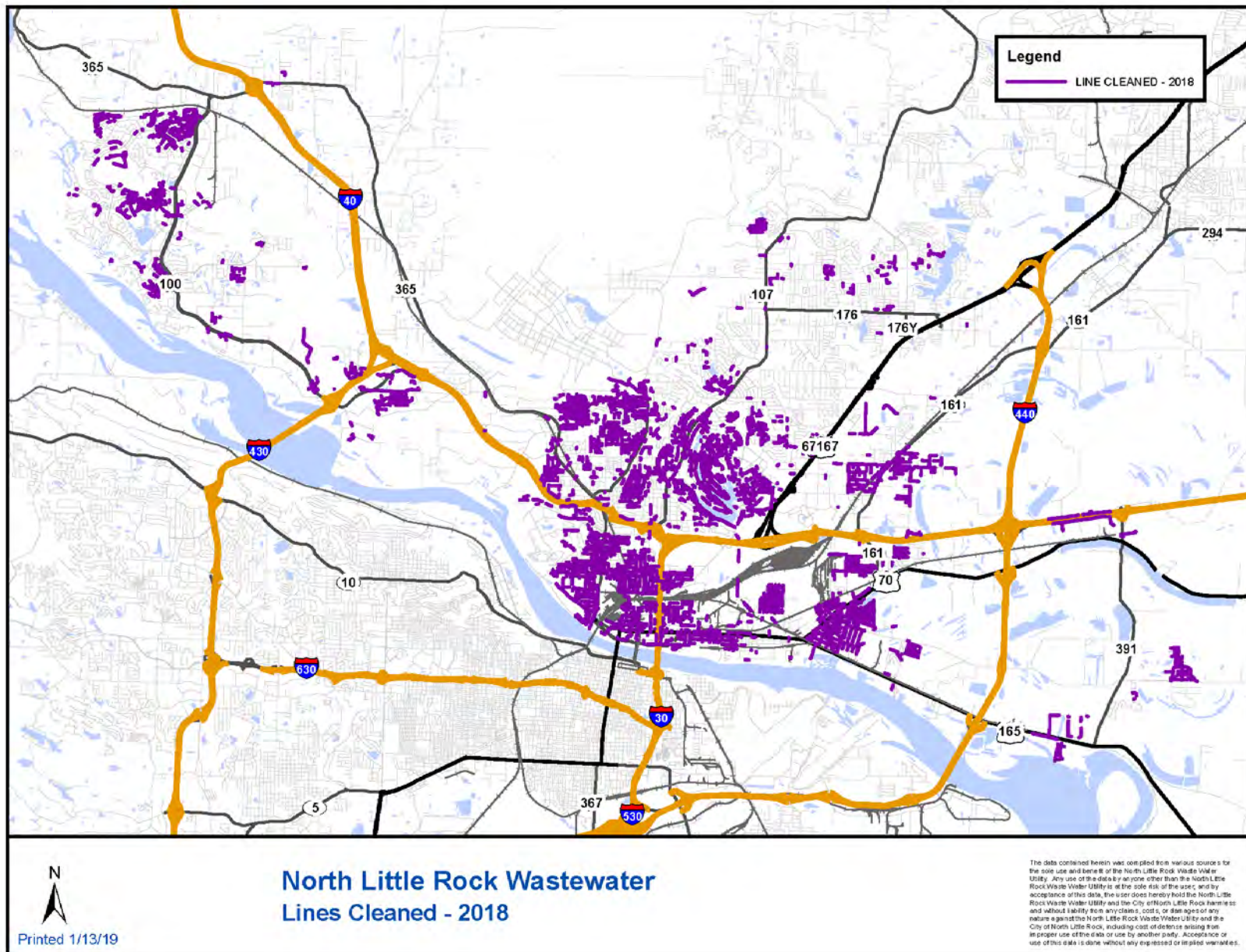
North Little Rock Wastewater Closed Circuit Television Inspection - 2018

The data contained herein was compiled from various sources for the sole use and benefit of the North Little Rock Wastewater Utility. Any use of the data by anyone other than the North Little Rock Wastewater Utility is at the sole risk of the user, and by acceptance of this data, the user does hereby hold the North Little Rock Wastewater Utility and the City of North Little Rock harmless and without liability from any claims, costs, or damages of any nature against the North Little Rock Wastewater Utility and the City of North Little Rock, including cost of defense arising from improper use of the data or use by another party. Acceptance or use of this data is done without any expressed or implied warranties.

- b. The following graph and map document the efforts to increase production of the cleaning crews in targeted areas.



NOTE: October 29, 2018, three (3) Vac-cons (unit #'s 104, 122 & 133) were destroyed in a fire at the Faulkner Lake Water Reclamation Facility. These Vac-cons have been replaced by units 141, 142, 143 and 144 (one new Vac-con was on-order prior to the fire) and put in service on January 3, 2019.



- ii. Increase production by adding additional crews or personnel

A fifth Vac-con was purchased and one of the Power Rodder Crews was converted to a Vac-con Crew in June 2015. NLRW now operates the following cleaning crews:

4 Vac-con Crews
1 Power Rodder Crew
1 Power Drive Crew

Vac-con #4 is kept as a spare and is shared by all Vac-con Crews when their equipment is down for maintenance.

- iii. Provide emergency response connections and Supervisory Control and Data Acquisition (SCADA) systems at pump stations and treatment plants.

Following the ice storms in December 2000, the Utility implemented a program to provide emergency pumping connections at all the pump stations. The connections allow a trailer mounted, suction lift pump to draw water from the wetwell and pump directly into the force main, thus by-passing the permanent pumping equipment during emergency situations such as power and equipment failures.

NLRW has four trailer mounted generators which can be stationed for temporary service at facilities with transfer switches.

Permanent mounted generators and automatic transfer switches are being incorporated in new facilities and in other select facilities to minimize potential SSOs related to power outages.

The following tables identify emergency response connections at pump stations and treatment plants.

Treatment Plant Emergency Response Connections

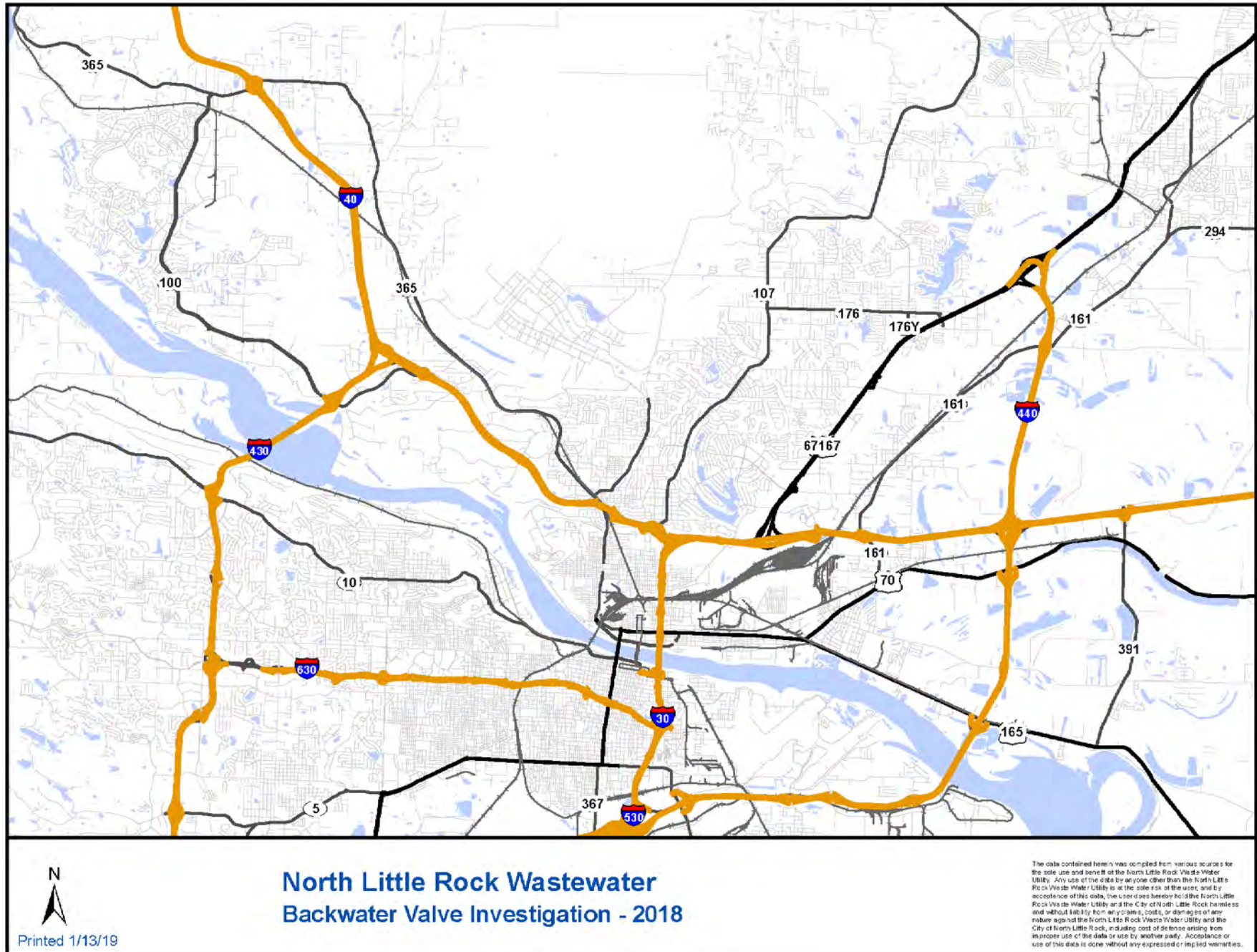
TREATMENT PLANT NAME	LOCATION	PUMP CONNECTION	TRANSFER SWITCH	GENERATOR	VOLTS	EXISTING SCADA TYPE
FAULKNER LAKE INFLUENT	7400 BAUCUM PIKE	N	AUTO	Y	480 3Ø	IGNITION
FAULKNER LAKE BLOWER FACILITY	7400 BAUCUM PIKE	N	AUTO	Y	480 3Ø	IGNITION
FAULKNER LAKE ADMIN BLDG	7400 BAUCUM PIKE	N	AUTO	Y	208V 240V	IGNITION
FAULKNER LAKE LAB BLDG	7400 BAUCUM PIKE	N	AUTO	Y	240V 480V	IGNITION
WHITE OAK INFLUENT	6000 HEILMAN	N	Y	N	480 3Ø	IGNITION
WHITE OAK TREATMENT PLANT	6000 HEILMAN	N	N	N	480 3Ø	IGNITION
FIVE MILE INFLUENT	5601 E 54TH STREET	N	AUTO	Y	480 3Ø	IGNITION
FIVE MILE EFFLUENT	5601 E 54TH STREET	N	AUTO	Y	480 3Ø	IGNITION
MAUMELLE TREATMENT PLANT	425 HYMAN DRIVE	N	AUTO	Y	480 3Ø	IGNITION

NORTH LITTLE ROCK WASTEWATER PUMP STATION EMERGENCY RESPONSE CONNECTIONS							
#	PUMP STATION NAME	PUMP CONNECTION	TRANSFER SWITCH	GENERATOR	VOLTS	EXISTING SCADA TYPE	SCADA UNIT #
402	BRIDGEWAY HOSPITAL #2	Y	N	N	230 1Ø	OMNISITE	30826
403	CLAYTON CHAPEL	Y	AUTO	Y	240 3Ø	OMNISITE	30827
405	DELTA LAWN	Y	AUTO	Y	240 3Ø	OMNISITE	30284
406	3306 E 10th	Y	AUTO	Y	240 3Ø	OMNISITE	30806
407	HWY 107	Y	AUTO	Y	240 3Ø	OMNISITE	30832
408	LANSBROOK	Y	Manual	N	240 3Ø	OMNISITE	30270
409	MARYLAND EAST	Y	AUTO	Y	240 3Ø	OMNISITE	30833
410	MARYLAND PLACE	Y	N	N	240 1Ø	OMNISITE	31056
413	COCK-OF-THE-WALK (#2)	Y	N	N	480 3Ø	OMNISITE	11153
414	MAYBELLINE	Y	AUTO	Y	480 3Ø	OMNISITE	30286
415	MCALMONT	Y	N	N	240 3Ø	OMNISITE	31059
416	MID-STATE	Y	N	N	240 3Ø	OMNISITE	31077
417	OAKBROOK	Y	N	N	480 3Ø	OMNISITE	10303
418	PINE TREE	N	N	N	240 1Ø	OMNISITE	31080
419	SHILLCUT	N	AUTO	Y	480 3Ø	IGNITION	
420	SHORTER COLLEGE	Y	N	N	240 3Ø	OMNISITE	31107
421	BURNS PARK EAST	N	N	N	240 3Ø	N/A	
422	BURNS PARK WEST	N	N	N	240 1Ø	N/A	
423	LAKEWOOD PLACE	N	N	N	230 1Ø	OMNISITE	31104
424	1440 INDUSTRIAL PARK	Y	N	N	208 3Ø	OMNISITE	30283
425	AUSTIN LAKE	Y	N	N	480 3Ø	OMNISITE	31105
426	FRONTIER DR- MORGAN	Y	AUTO	Y	480 3Ø	OMNISITE	31106
427	MARCHE-MORGAN	Y	N	N	480 3Ø	OMNISITE	30808
429	BAUCUM INDUSTRIAL	Y	N	N	208 3Ø	OMNISITE	30282
430	WILCOX	Y	AUTO	Y	480 3Ø	OMNISITE	30266
431	QUAPAW	Y	AUTO	Y	240 3Ø	OMNISITE	30285
432	HWY 365--SHERMAN RD	Y	AUTO	Y	480 3Ø	OMNISITE	30810
433	GAP CREEK	Y	AUTO	Y	240 3Ø	OMNISITE	30805
434	HARRIS INDUSTRIAL PARK	Y	N	N	480 3Ø	OMNISITE	30268
435	BURNS PARK RV PARK	N	N	N	240 1Ø	N/A	
436	BURNS PARK LANDSCAPING	N	N	N	240 1Ø	N/A	
437	BURNS PARK SOUTH	N	N	N	240 1Ø	N/A	
438	HILL LAKE	N	AUTO	Y	480 3Ø	OMNISITE	30287
439	BURNS PARK SOCCER FIELDS	N	N	N	230 1Ø	N/A	
440	COLLINS INDUSTRIAL PARK	Y	AUTO	Y	480 3Ø	OMNISITE	30562
441	COUNTS MASSIE	Y	AUTO	Y	480 3Ø	OMNISITE	30807
442	CHAPEL RIDGE	Y	N	N	240 3Ø	OMNISITE	30561
443	RIXIE PUMP -HWY 161	Y	AUTO	Y	480 3Ø	OMNISITE	30552
444	RIXIE PUMP-LUCKY DR.	Y	AUTO	Y	480 3Ø	OMNISITE	30553
445	RIXIE PUMP- TRAMMEL RD	Y	AUTO	Y	480 3Ø	OMNISITE	30556
446	RIXIE PUMP-RIXIE RD- RR TRACK	Y	N	N	480 3Ø	OMNISITE	30555
447	CYPRESS CROSSING	Y	AUTO	Y	480 3Ø	OMNISITE	30269
448	CRYSTAL BAY	Y	N	N	480 3Ø	OMNISITE	30809
449	TRAMMEL ESTATES	Y	N	N	240 1Ø	OMNISITE	30557
450	EUREKA GARDEN & 46TH	Y	AUTO	Y	240 3Ø	OMNISITE	30560
451	EUREKA GARDEN RD	Y	AUTO	Y	240 3Ø	OMNISITE	30558
452	EUREKA GARDEN & JUDY LANE	Y	Manual	N	240 3Ø	OMNISITE	30559
453	FAULKNER CROSSING 5	Y	AUTO	Y	480 3Ø	OMNISITE	30288
601	BOURIES	N	N	N	230 1Ø	OMNISITE	10718
602	C.C. BALLFIELDS	Y	AUTO	Y	480 3Ø	OMNISITE	10570
603	COUNTS MASSIE #2	N	N	N	230 3Ø	OMNISITE	11026
604	DIAMOND POINT	N	N	N	480 3Ø	OMNISITE	11205
605	DURANGO	N	N	N	460 3Ø	OMNISITE	11181
606	HIGH SCHOOL	N	N	N	480 3Ø	OMNISITE	11176
607	LAWRENCE	N	N	N	230 1Ø	OMNISITE	11020
608	MARANES	N	N	N	230 1Ø	OMNISITE	11009
609	MASTERS PLACE	N	N	N	230 1Ø	OMNISITE	11023
610	MAUMELLE VALLEY	Y	AUTO	Y	480 3Ø	OMNISITE	11014
611	MAUMELLE WOODS	N	N	N	480 3Ø	OMNISITE	11146
613	MURPHY DRIVE	N	AUTO	Y	460 3Ø	IGNITION	
614	NAYLOR	N	N	N	480 3Ø	OMNISITE	11134
615	NEW BEDFORD	N	N	N	480 3Ø	OMNISITE	11206
616	NORFOLK	N	N	N	230 1Ø	OMNISITE	11193
617	ODOM/BLUE MOUNTAIN	N	N	N	230 1Ø	OMNISITE	11141
618	OSAGE FALLS	N	N	N	230 3Ø	OMNISITE	11155
619	OSAGE HILLS	N	MANUAL	N	230 3Ø	OMNISITE	11156
620	PALASADES	N	N	N	480 3Ø	OMNISITE	11138
621	PONCA	N	N	N	230 3Ø	OMNISITE	11196
622	RIDGELAND	N	N	N	230 1Ø	OMNISITE	11021
623	RIDGELAND/ODOM	N	N	N	230 1Ø	OMNISITE	11179
624	RIVER RUN	N	N	N	230 3Ø	OMNISITE	11189
625	SEMINOLE EAST	Y	AUTO	Y	460 3Ø	OMNISITE	10331
626	SEMINOLE WEST	Y	AUTO	Y	230 1Ø	OMNISITE	11192
627	TOWN CENTER	N	N	N	230 1Ø	OMNISITE	11170

- iv. Identify areas subject to building/private property backups.

NLRW utilizes trouble calls to initiate an investigation to determine areas subject to building/private property backups. A trouble call attributed to “high water” and resulting in slow draining fixtures or backups in buildings or property initiates a work order to the Civil Engineer. The Civil Engineer conducts an investigation to determine the cause of the backup and documents the need for corrective action. The Civil Engineer documents the need for a backwater valve and sends a letter to the property owner. A copy of the letter is given to the GIS Administrator for entry into the GIS database.

Following is a map identifying the addresses investigated in the calendar year for the need for backwater valves.



v. Public education

In 2012, NLRW expanded its Grease Reduction Program to include additional items to 'not' put down the drain and has renamed the program "Maintain YOUR Drain." Expansion of the Grease Reduction Program was largely brought about by increased problems associated with so-called "flushable wipes."

A summary of the activities conducted by the "Maintain YOUR Drain" staff, during the calendar year is attached, as well as copies of the mailers.

Staff designed educational decals and had them installed on the Vac-cons and TV vans. The concept is to use the trucks as moving billboards and to put the message where the work is (e.g. A customer sees the Vac-con cleaning a sewer line and the sign on the side of the Vac-con says "Wipes clog pipes. Don't flush wipes!" or "Maintain YOUR Drain! Don't pour grease down the drain!")

North Little Rock Wastewater

Maintain YOUR Drain Program

(Educating the public on what "NOT" to put down the drain.)

Date	Group Name	Location	Approximate # of Attendees
03/18/18	Lakewood Elementary	1800 Fairway North Little Rock, AR 72116	84
10/03/18	NLR Montessori School	900 Mission Road, NLR, AR 72118	14
10/16/18	Oak Grove Elementary	5703 Oak Grove Rd., NLR, AR 72118	55
10/28/18	Lakewood Elementary	1800 Fairway Ave., NLR, AR 72116	85
Total Attendees 2018			238

March-18 61,500 Mailers were sent out with information on how to dispose of grease properly. It also contained information on what not to put down the drain.

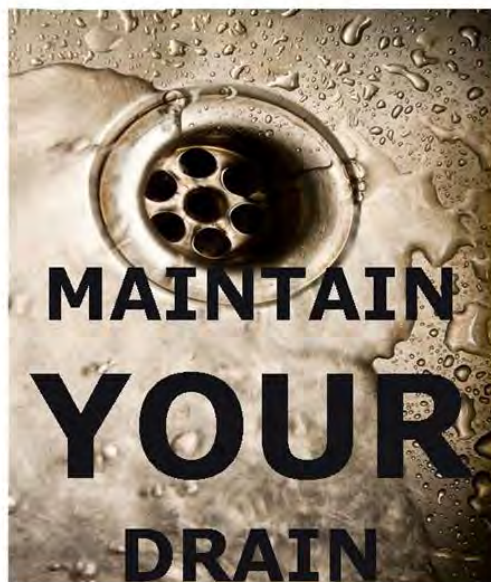
July-18 61,500 Mailers were sent out with information on how to dispose of grease properly. It also contained information on what not to put down the drain.

December-18 61,500 Mailers were sent out with information on how to dispose of grease properly. It also contained information on what not to put down the drain.

Children at the schools were given bracelets with the North Little Rock Wastewater Logo and a message that reads "Protect Our Water" and a can lid with North Little Rock Wastewater Logo with a message that reads "MAINTAIN YOUR DRAIN" and instructions on how to properly dispose of grease as a reminder of how the dangers of improper grease disposal can harm our environment. Informative brochures are handed out at all meetings with material on grease and pharmaceutical disposal.



501-945-7186



Grease

Never pour grease or cooking oil down sink drains or garbage disposals.

Place small amounts of grease and oil in the trash.

Large containers of cooking oil can be recycled at

12th & Willow
North Little Rock, AR 72114
(501) 371-8345

WWW.NLR.AR.GOV



501-945-7186



Do **Not** Put Down the
Drain or Toilet

Baby Wipes
Clothing/Rags
Paper Towels
Automotive Oils
Pharmaceuticals
Cosmetics/Fragrances
Sunscreen Products
Chemicals

WWW.NLR.AR.GOV



501-945-7186



Pharmaceuticals

Do NOT flush them down the toilet.

Mix old pharmaceuticals with used coffee grounds or kitty litter.

Place them in a sealable container and throw them in the trash.

OR

Contact local law enforcement for community take-back programs.

WWW.NLR.AR.GOV



vi. Treatment plant stormwater runoff protection

Part of NLRW's effort to comply with treatment plant stormwater runoff protection included the addition of "Maintenance and Emergency Equipment Storage Facilities." This project included the addition of metal buildings to house maintenance and emergency response equipment.

This project also included the addition of a vehicle wash station, site grading and drainage improvements.

Section B.i provides additional information regarding this project.

vii. Secure funding for Capital Improvement Projects

- a. On November 28, 2012, NLRW closed on a \$21,000,000 loan with the Arkansas Natural Resources Commission. As of January 20, 2017, these loan funds have been fully expended.
- b. On October 25, 2016, NLRW closed on a \$30,000,000 loan with the Arkansas Natural Resources Commission. Through December 31, 2018, North Little Rock Wastewater has spent \$10,786,227 of the \$30,000,000 loan.

viii. Point Repairs

NLRW added a fourth construction crew in 2016 to reduce response time for disconnects which were building up a backlog of work orders. This crew may also assist with point repairs and other excavation related repairs depending on the work load.

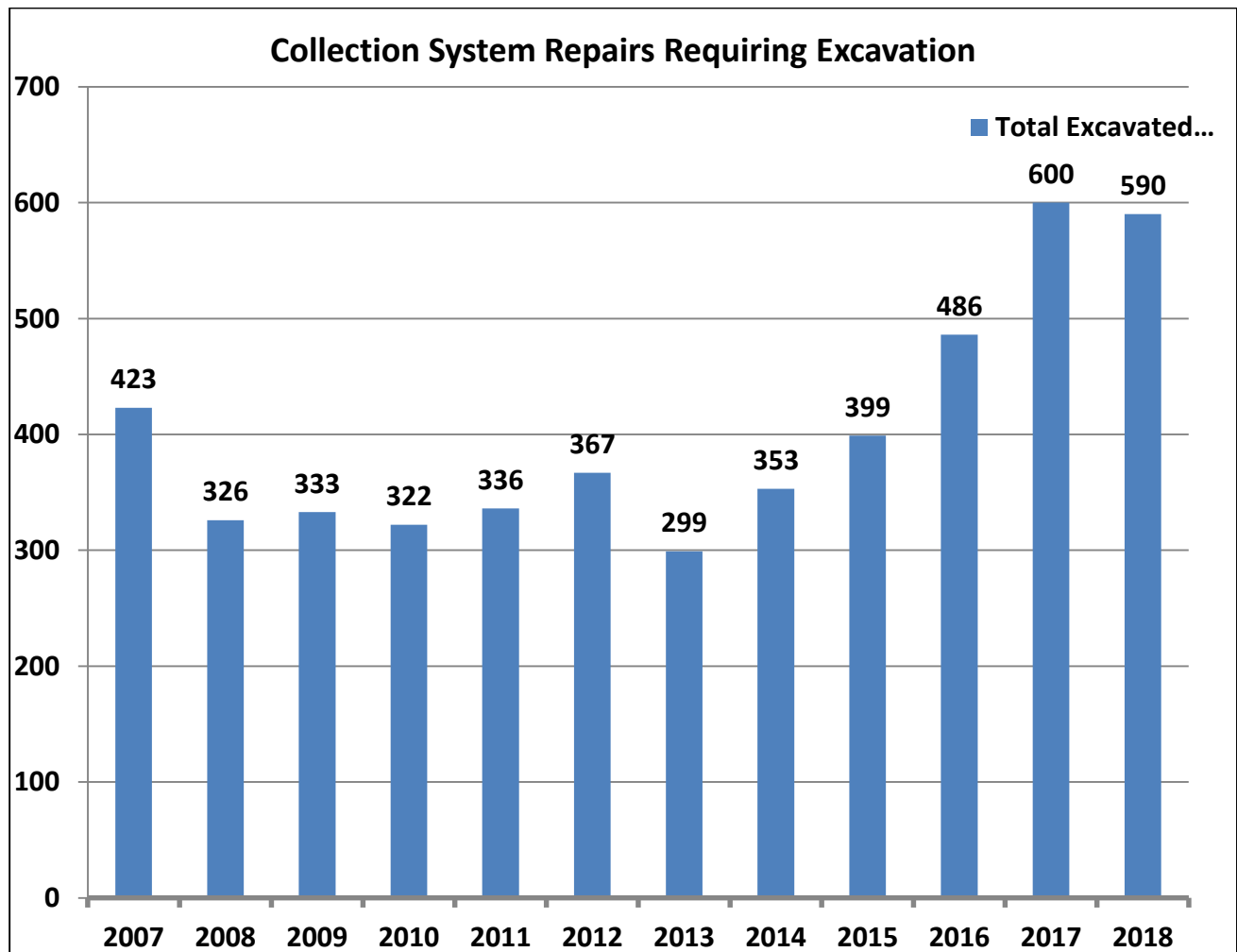
Outside services contractors may be used for certain repairs depending on work load, schedule and need for specialized services. Specialized services include repairs beneath the water table, deep excavations, repairs complicated by other structures, repairs involving large diameter pipelines, etc.

Following is a summary of repairs completed in the collection system requiring excavation:

A summary of point repairs completed by the NLRW Collection Systems Department is included in Appendix C. *End of Year Work Recap Report*.

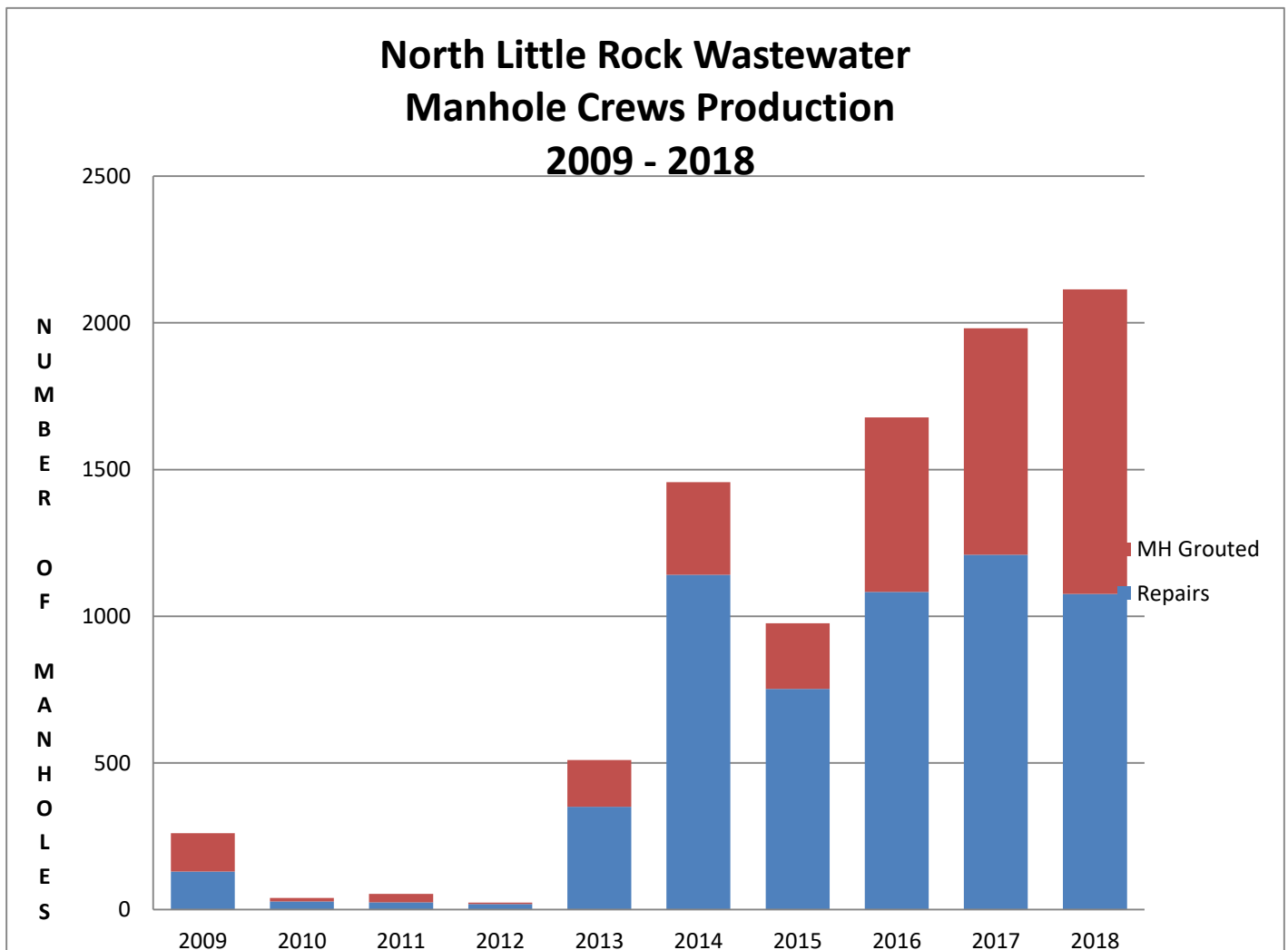
SUMMARY of Collection System Repairs Requiring Excavation

<u>Year</u>	<u>Point Repairs</u>	<u>New Manholes</u>	<u>New Line Segments</u>	<u>Disconnects</u>	<u>Repairs by Outside</u>	<u>TOTAL</u>
					<u>Services Contractors</u>	
2007	316	30	70	7	n/a	423
2008	280	17	8	21	n/a	326
2009	299	13	20	1	n/a	333
2010	289	24	7	2	n/a	322
2011	316	12	6	0	2	336
2012	337	22	6	1	1	367
2013	273	18	5	0	3	299
2014	332	11	10	0	0	353
2015	364	15	8	4	8	399
2016	381	26	7	66	6	486
2017	371	24	13	191	1	600
2018	357	34	14	185	0	590
						3,430



ix. Manhole Repairs

Following is a graph of manhole repairs completed in the collection system:



2. **Civil Penalty Payment Summary**

NLRW completed payment of a \$105,000 Civil Penalty on February 13, 2013.

3. **Notifications of Deficiencies**

CAO Notices of Deficiencies received from ADEQ: **None** (no. & date)
NLRW response to Notice of Deficiencies: **N/A** (must be within 15 days)

Summary of NLRW actions to address deficiencies: **N/A**

4. **Compliance Delays**

Notifications of Compliance Delays submitted to ADEQ: **None** (no. & date)

Length of Compliance Delay: **N/A**

Cause of Compliance Delay: **N/A**

Measures Taken to Minimize Delay: **N/A**

Timetable for Implementing Additional Measures: **N/A**

5. **Certification**

As required by the Order and Agreement, Paragraph 3, North Little Rock Wastewater certifies that we are complying with the ADEQ-approved Wastewater Master Plan.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read "ME Wilkins", with a horizontal line extending to the right.

Marc E. Wilkins, PE
Director
North Little Rock Wastewater

APPENDIX

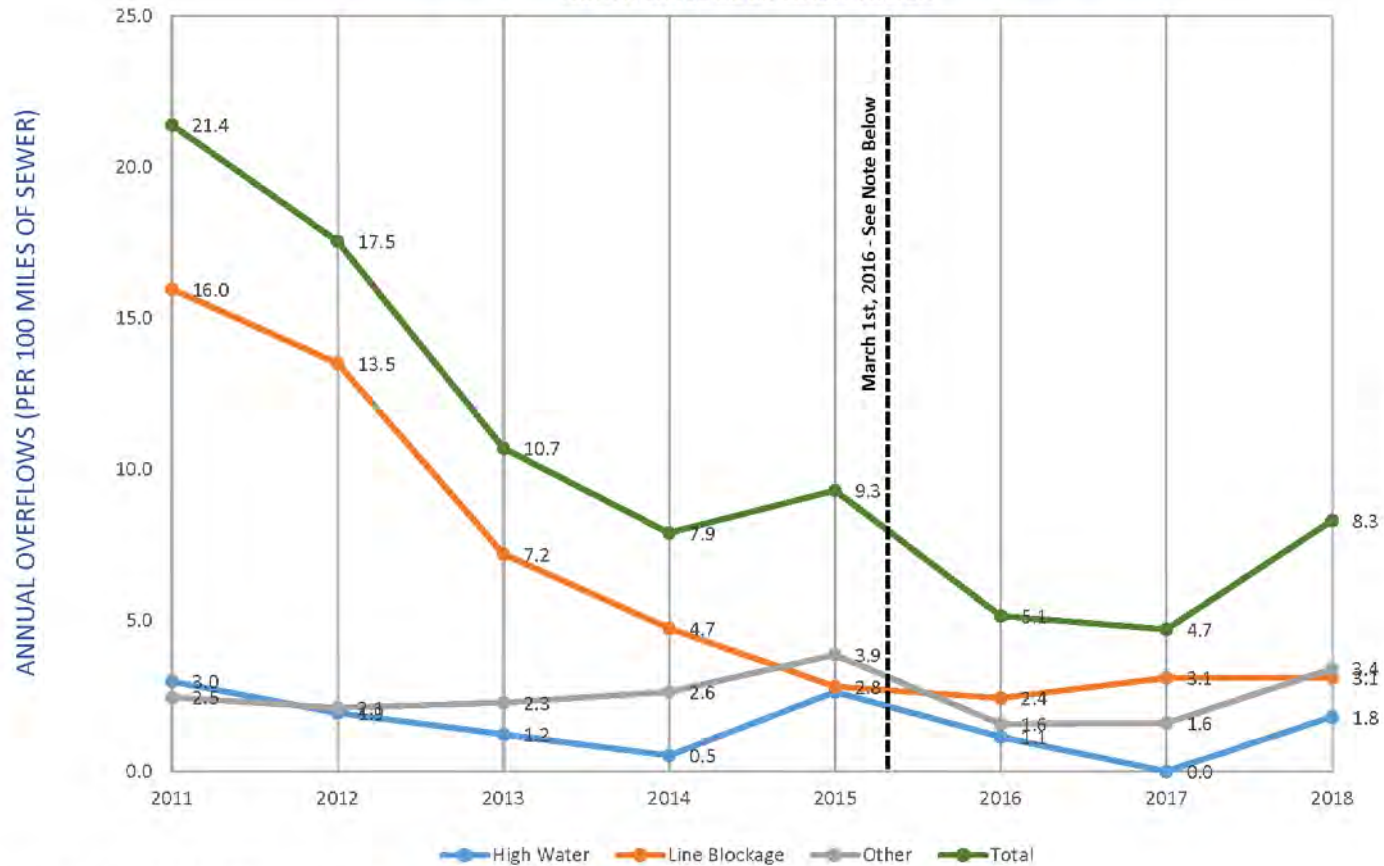
A. Annual Overflows by Category

B. SSO Locations 2018

C. 2018 Year-to-Date Work Recap Report (Collection Systems Department)

D. Collection System Rehabilitation

APPENDIX A
ANNUAL OVERFLOWS BY CATEGORY (PER 100 MILES OF SEWER)
NORTH LITTLE ROCK WASTEWATER

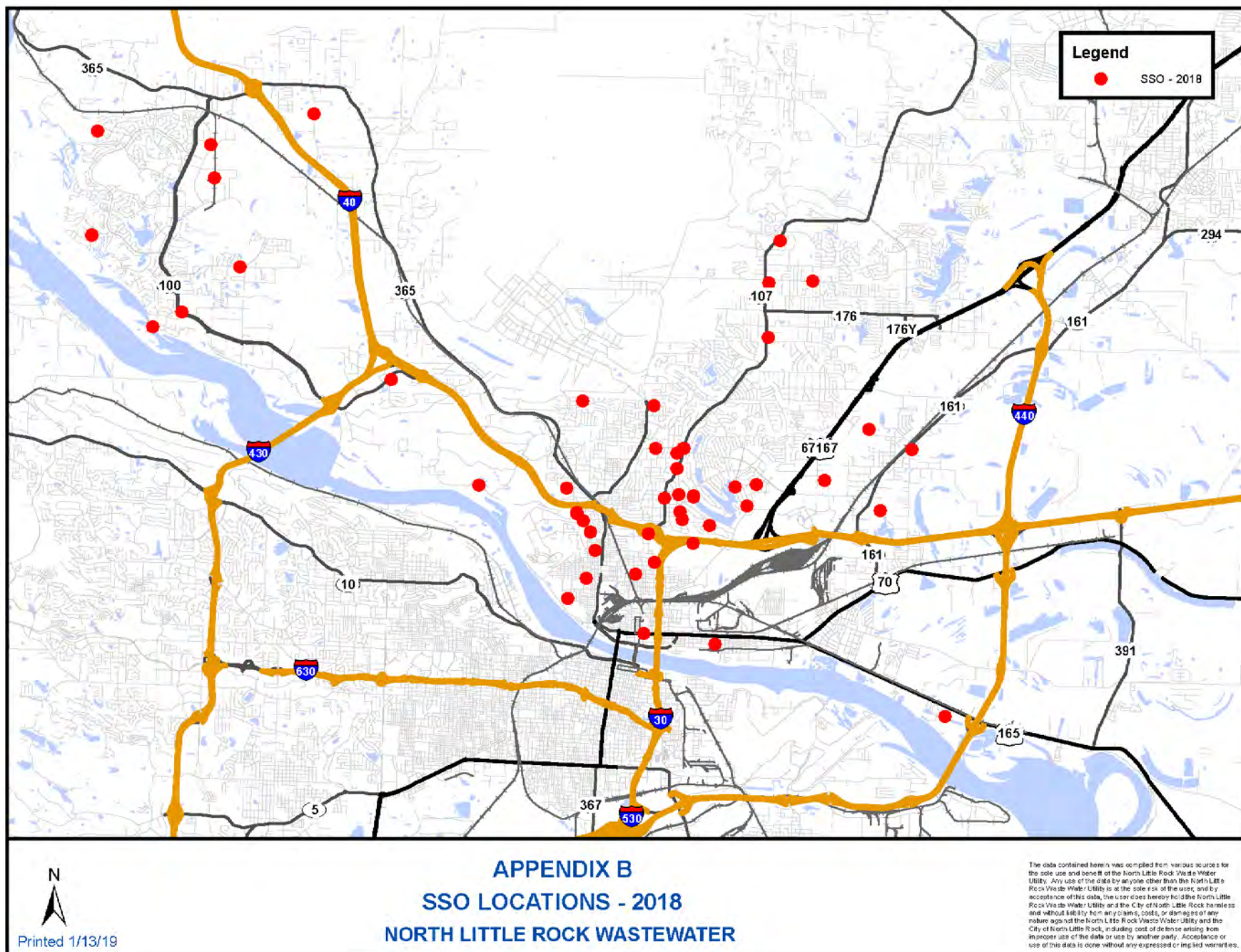


Note: On March 1st, 2016, the NLRW assumed O&M responsibilities of the Maumelle SID 500 of Pulaski County (d/b/a MWM). The MWM collection system contained 131 miles of pipeline.
NLRW collection system prior to March 1st, 2016: 572 miles
NLRW collection system following March 1st, 2016: 709 miles

The values shown for High Water in 2018 include 10 SSOs that occurred during wet weather that met or exceeded the design storm event.
The values shown for Other in 2018 include 5 SSOs that occurred as a result of contractor damage to the collection system.

Jim Milum
Printed 1/17/19

APPENDIX A



APPENDIX C

North Little Rock Wastewater Utility													
2018 Year-To-Date Work Recap Report													
Crews:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
MANHOLE:													
Disconnects	0	0	0	0	0	0	0	0	0	0	0	0	0
Taps	0	1	1	2	2	0	0	0	0	2	0	0	8
Repairs	47	41	31	66	125	118	152	89	73	64	150	120	1,076
# of MH's Grouted	41	21	13	56	117	150	141	107	83	55	153	101	1,038
# of Coats	0	0	0	0	0	0	0	0	0	0	0	0	0
MH Depth (Ft/In)	83.0	10.0	0.0	44.0	54.0	0.0	29.0	0.0	122.0	0.0	72.0	0.0	414
# of Bags of Grout	42	5	17	23	25	8	6	20	26	7	27	1	207
POWER DRIVE:													
# of Ft Cleaned	10,466	7,764	7,852	17,070	9,587	10,290	12,502	9,126	4,764	8,133	14,126	11,155	122,835
PWR RODDER #1:					0						0		
# of Ft Cleaned	0	0	0	0	0	544	0	1,921	1,215	0	486	0	4,166
REPAIR #1:											0		
Repairs	2	9	6	15	6	9	2	5	5	11	9	6	85
New Manholes	3	1	0	0	0	2	1	1	4	1	1	0	14
New Lines	1	1	0	0	0	2	2	2	0	0	0	0	8
Disconnects	0	0	0	0	0	0	0	0	0	0	0	0	0
Taps	0	1	2	1	2	2	1	1	1	0	0	1	12
Miscellaneous	1	6	4	4	6	9	1	1	5	8	9	10	64
REPAIR #2:											0		
Repairs	12	16	14	13	13	15	11	11	11	10	8	8	142
New Manholes	0	0	0	0	0	1	0	0	0	1	0	0	2
New Lines	0	0	0	0	1	0	0	0	0	0	0	0	1
Disconnects	0	0	0	0	0	0	0	0	0	0	0	3	3
Taps	0	0	1	0	1	1	0	0	0	0	0	0	3
Miscellaneous	5	5	3	2	1	8	3	7	7	14	3	11	69
REPAIR #3:											0		
Repairs	14	9	8	2	3	7	4	6	1	8	6	1	69
New Manholes	1	2	2	2	1	3	0	1	3	0	1	0	16
New Lines	0	0	0	2	2	0	0	0	0	0	0	1	5
Disconnects	0	0	0	0	0	0	0	0	0	4	1	1	6
Taps	1	1	0	0	0	0	0	0	0	0	1	0	3
Miscellaneous	8	4	5	0	5	4	3	5	0	7	6	7	54
REPAIR #4:											0		
Repairs	10	7	4	8	7	2	6	4	3	7	1	2	61
New Manholes	1	1	0	0	0	0	0	0	0	0	0	0	2
New Lines	0	0	0	0	0	0	0	0	0	0	0	0	0
Disconnects	13	16	24	17	23	11	12	20	6	13	10	11	176
Taps	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	3	2	3	3	2	8	1	2	15	7	2	2	50
TROUBLE:													
# of Ft Cleaned	562	535	513	375	10	1,017	535	140	214	0	140	0	4,041
Stop-Ups	55	61	60	36	38	27	32	24	23	19	31	10	416
Private Lines	38	42	40	24	31	16	25	23	13	18	36	47	353
Cave-Ins	5	5	17	4	8	1	7	7	2	6	4	6	72
Flooded Houses	1	0	0	0	0	0	0	0	0	0	0	0	1
Miscellaneous	49	47	43	60	56	62	59	74	43	66	58	48	665
Total Calls	107	108	120	91	103	72	97	104	78	95	104	111	1,190
VACCON #1:													
# of Ft Cleaned	16,870	18,032	32,649	35,662	30,077	27,367	33,556	32,957	21,927	19,038	0	0	268,135
VACCON #2:													
# of Ft Cleaned	25,165	33,213	50,024	37,847	52,657	38,991	36,740	30,468	22,355	31,435	31,132	23,532	413,559
VACCON #3:													
# of Ft Cleaned	26,400	32,048	47,902	39,651	19,912	48,252	51,892	29,858	27,325	31,055	39,602	28,019	421,916
VACCON #4:													
# of Ft Cleaned	0	0	770	17,588	32,257	0	13,127	27,713	4,990	5,057	0	0	101,502
VACCON #5:													
# of Ft Cleaned	37,166	18,864	37,741	27,262	33,471	39,634	11,234	16,510	24,285	21,603	0	0	267,770
T V #1													
# of Ft	15,655	16,062	18,246	21,191	22,306	14,929	25,503	27,714	16,980	11,684	0	1,397	191,667
T V #2													
# of Ft	13,890	15,900	22,580	21,704	18,470	20,126	16,991	24,652	17,050	19,899	1,083	2,985	195,330

