



North Little Rock Wastewater

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



2020 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 submit the final promised annual report on this CAO.

(**COVER PHOTO** – New Collection System Department Building – August 2, 2020)

North Little Rock Wastewater 2020 End of Year Report

Consent Administrative Order LIS 10-218 Closed

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North Little Rock Wastewater 2020 End of Year Report

Consent Administrative Order LIS 10-218
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**Attn: Richard Healey, Branch Manager
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 2020 End of Year and Final 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 CAO LIS 10-218 CLOSED	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
Faulkner Lake	Effluent Flume Wall Extension	\$ 16,454	100%	4/3/2020
Faulkner Lake	VFD Replacement & Service Entrance Modifications	\$ 136,800	100%	11/16/2020
Maumelle	Maumelle/White Oak Diversion Project	\$ 16,000,000	90% Design	12/31/2020
White Oak	Electrical Relocation	\$ 72,000	100%	7/23/2020
White Oak	Influent Pump Station Generator	\$ 36,269	100%	12/16/2020
White Oak	All Weather Access Road	\$ 202,685	100%	12/31/2020
		\$28,085,174		

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	26,834	\$1,980,651	100%	12/02/20
W. Levy/212 Basin Pipe Bursting 2016 Rehabilitation	Pipe Bursting	31,561	\$1,978,362	100%	08/21/19
Lower Riverside Interceptor	CIPP/SL	4,345	\$4,400,000	Design	12/31/18
South Levy/Indian Hills CIPP 2017 Rehabilitation	CIPP	51,343	\$2,925,407	97%	12/31/20
South Levy/Indian Hills Pipe Bursting 2017 Rehabilitation	Pipe Bursting	45,053	\$3,532,117	99%	12/31/20
Lakewood Pipe Bursting 2019 Rehabilitation Project	Pipe Bursting	24,877	\$2,199,329	99%	12/31/20
Lakewood CIPP 2019 Rehabilitation Project	CIPP	20,264	\$968,199	93%	12/31/20
Upper Riverside Interceptor CIPP 2020 Rehabilitation Proj	CIPP	6,107	\$1,509,733	100%	12/21/20
Dark Hollow Interceptor CIPP 2020 Rehabilitation Project	CIPP	8,965	\$1,814,000	Bidding	12/31/20
	TOTAL	293,300	\$27,254,059		

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	100%	07/31/19
2019 Wilcox Liftstation Rehabilitation Project	\$54,230	100%	03/04/19
2019 Auxiliary Generators & Transfer Switches	\$135,850	100%	12/01/20
TOTAL \$	\$6,802,412		

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>			

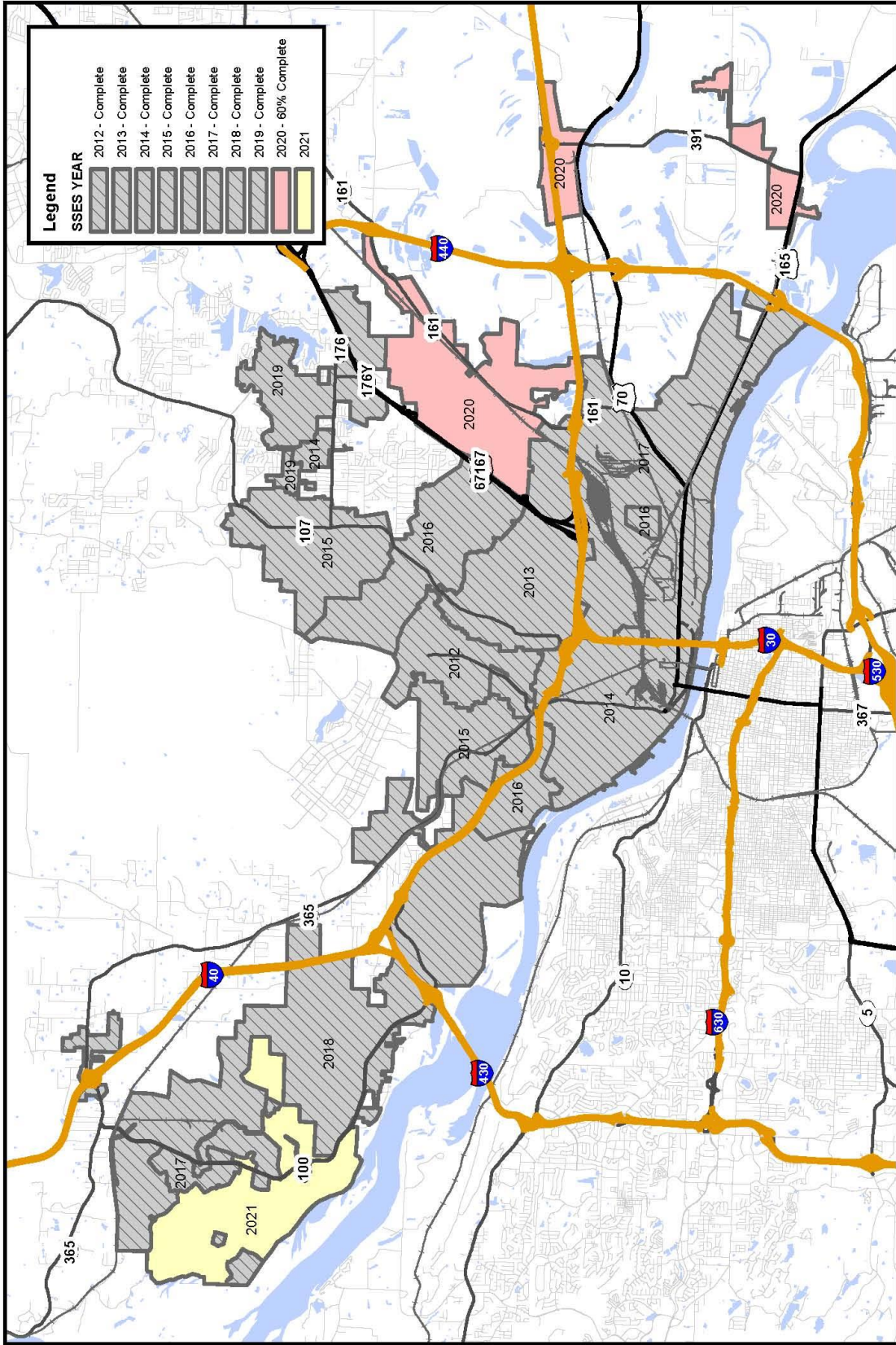
C. Sewer System Evaluation Survey (SSES)

Following is a summary of SSES fieldwork completed to date.

Project Name	Smoke Testing			Manhole Inspections			Dye Testing			CCTV
	Quantity	Defects	I/I	Quantity	Defects	I/I	Quantity	Defects	I/I	Quantity
	(LF)	(EA)	(mgd)	(EA)	(EA)	(mgd)	(EA)	(EA)	(mgd)	(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)	437,058	193		1,833	2,047	1.232	15	11	0.168	402,424
2019 SSES	216,867	281	0.25	877	820	0.471	15	13	0.131	50,537
2020 SSES	137,160			1,300			15			242,000
* System Wide	2,859,432	4,586	6.054	12,376	13,333	7.008	373	278	6.734	2,985,069

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	\$690,406	100%	6/2019
SSES 2019	\$441,923	100%	8/2020
SSES 2020	\$462,060	41%	12/2020
TOTAL	\$4,576,104		

Following is a map delineating the schedule of SSES fieldwork.



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North Little Rock Wastewater SSSES Schedule



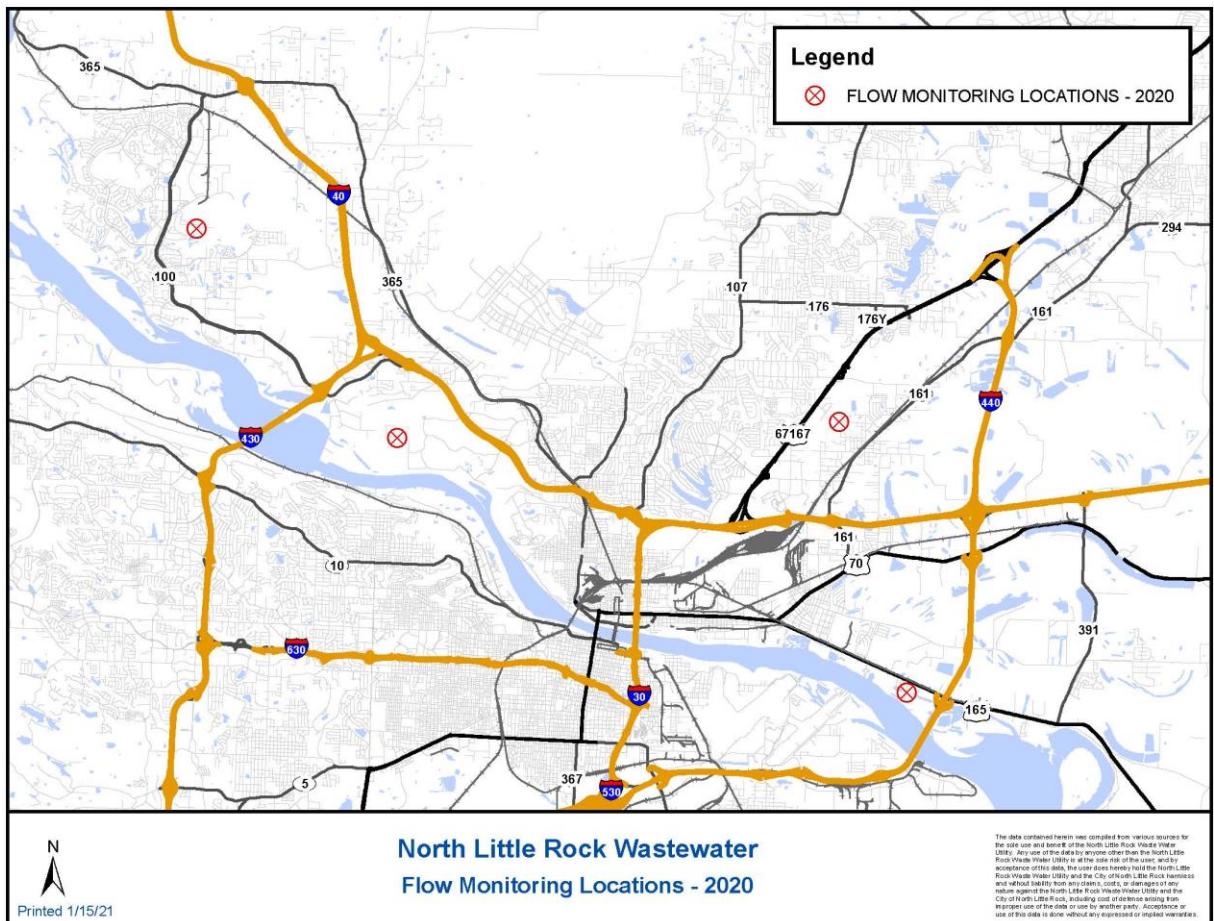
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D. SSES, Pumping Station, Capacity Assessment, and Hydraulic Model Evaluation Report

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.



D. Collection System and Wastewater Treatment Plant Remedial Measures Plan

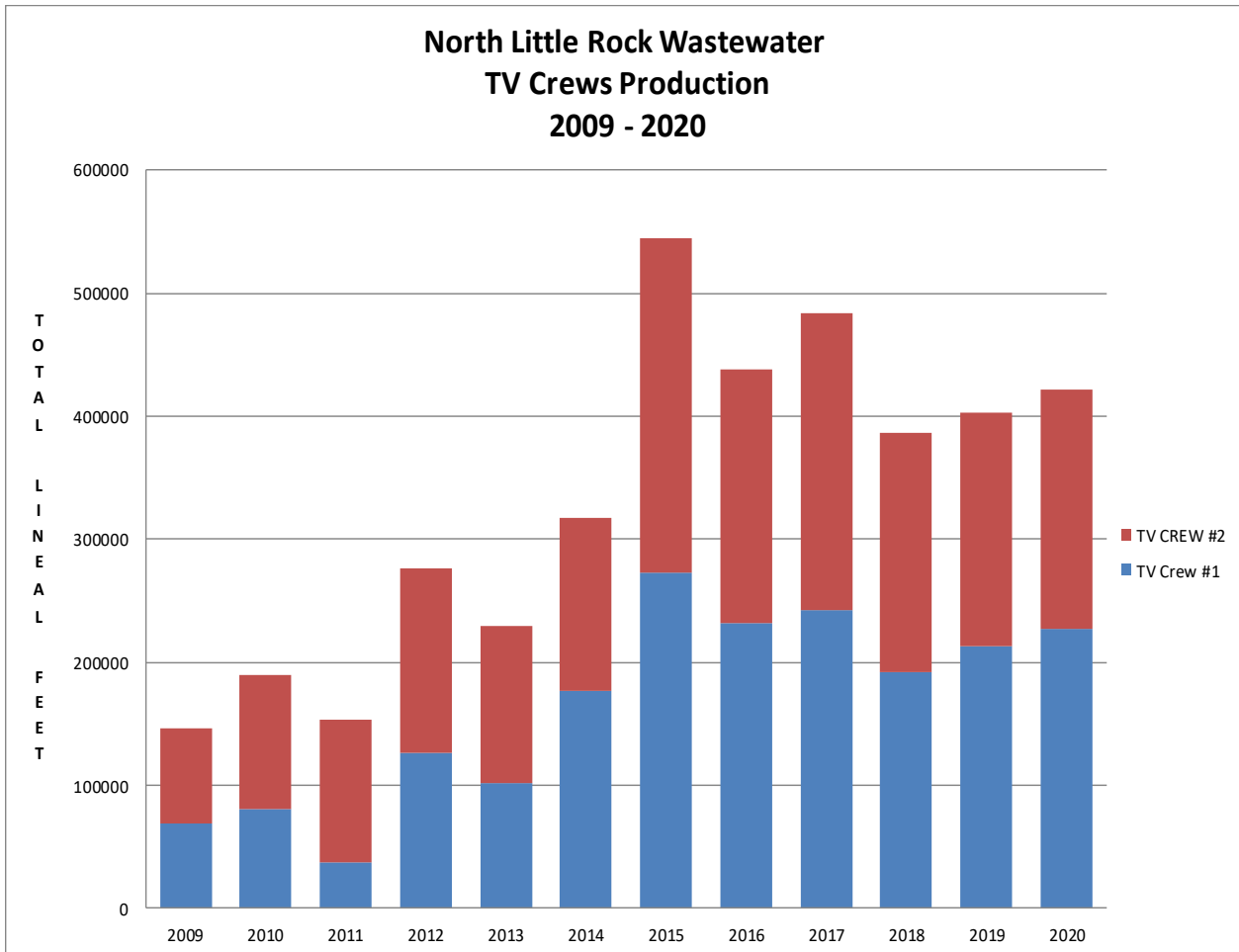
Following is an update of progress on specific collection system and WWTP Remedial Measures:

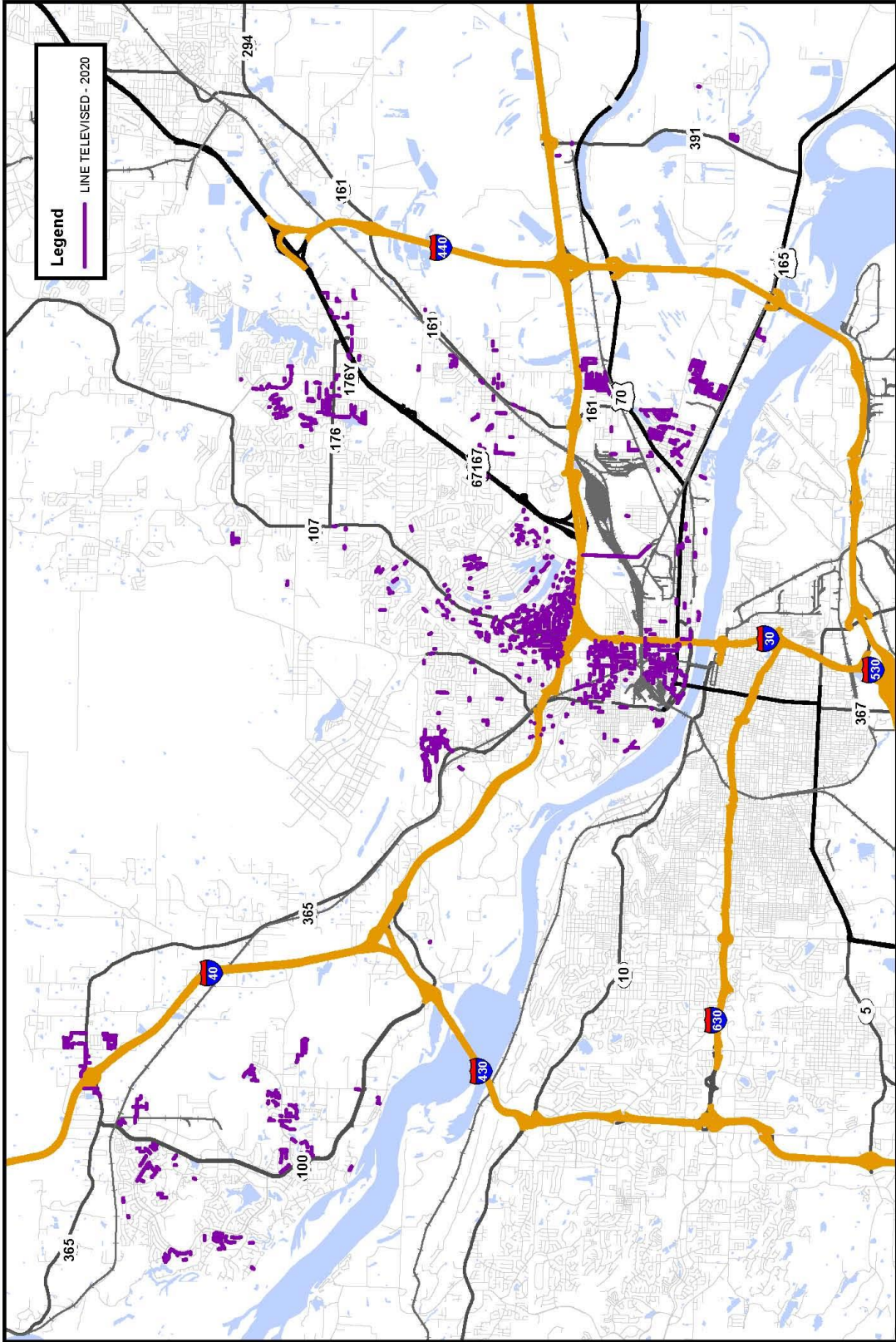
The remedial measures plan generally consists of measures involving existing equipment, personnel and practices which can be modified to reduce the occurrence of SSOs.

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.



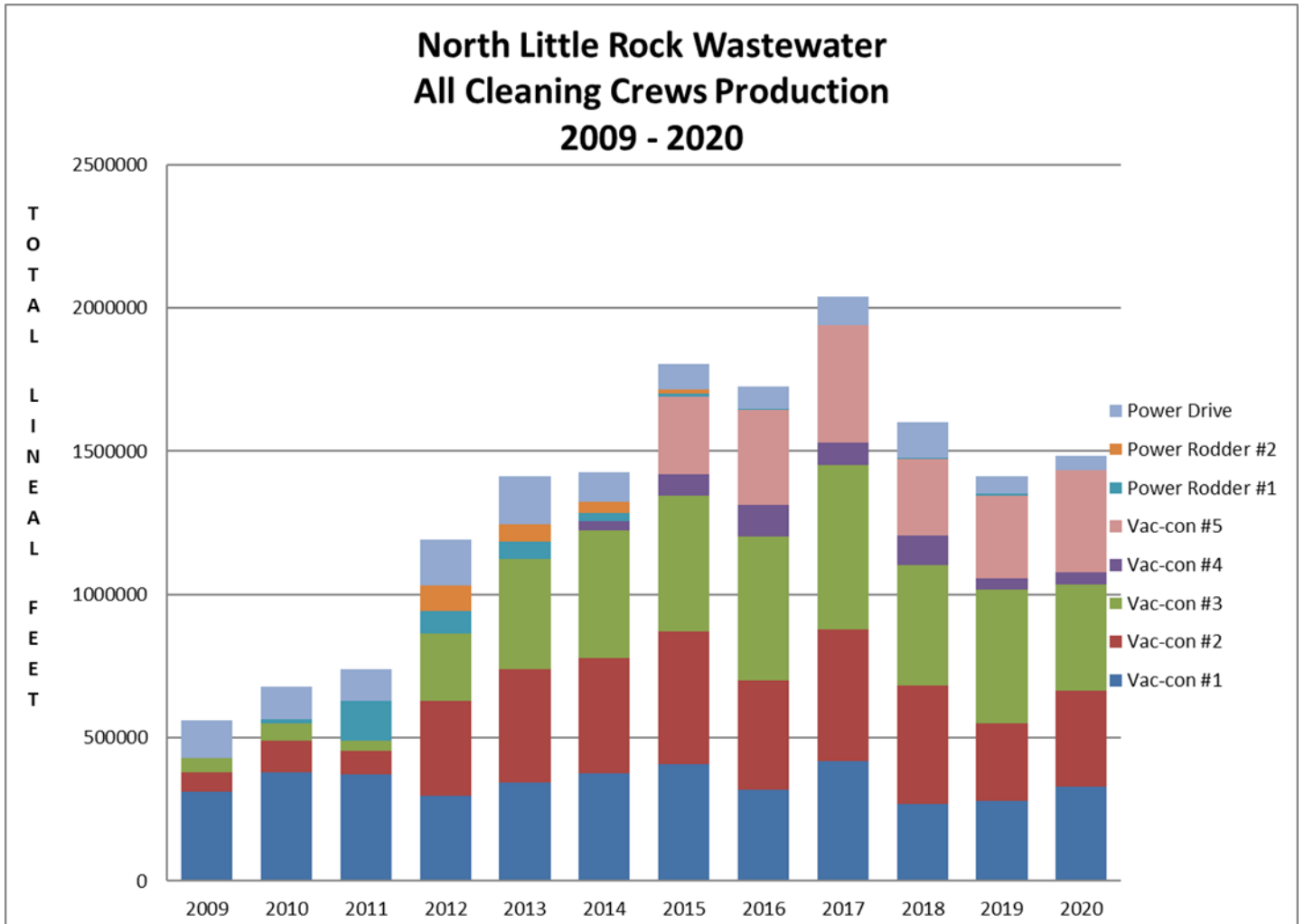


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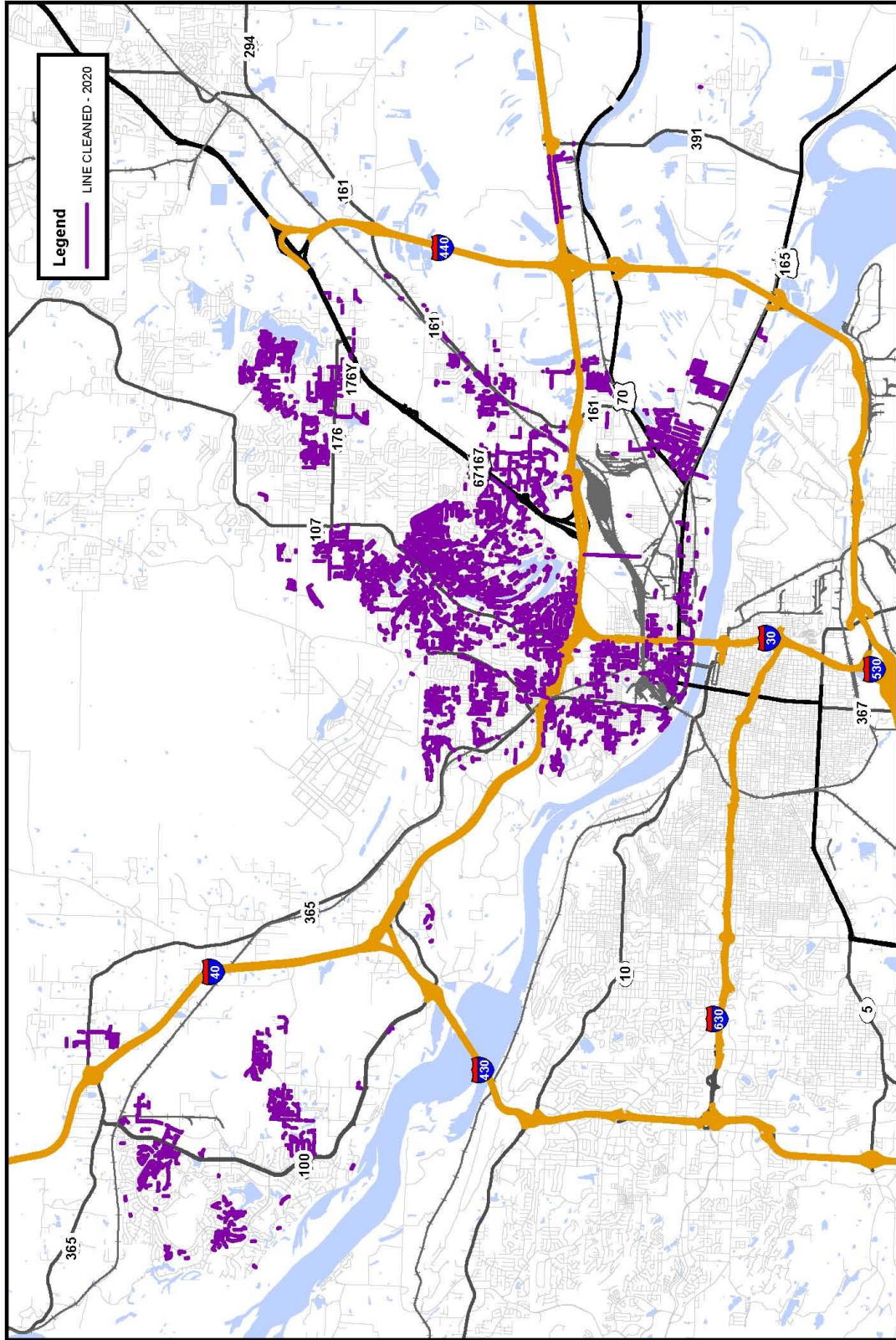
North Little Rock Wastewater Closed Circuit Television Inspection - 2020


 Printed 1/13/21

- 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.



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North Little Rock Wastewater Lines Cleaned - 2020

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- 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.

Liftstations were upgraded from using OMNISITE units to being incorporated into the existing Ignition SCADA system with the Treatment Plants. The advantages of doing this includes the following:

All stations controls are updated to the same PLC and set up in a similar fashion to reduce troubleshooting and downtime on future control issues. This simplifies the need for spare controllers and parts the Utility keeps on the shelf for emergency situations. Level transducers are installed at each lift station. This provides more data for Utility staff, while eliminating issues with sticking floats. Existing float systems do remain in place as a backup system. The new system estimates pump gpm, which is used to determine pump clogging. A new, more robust alarm system is custom tailored for the North Little Rock Wastewater Utility.

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

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

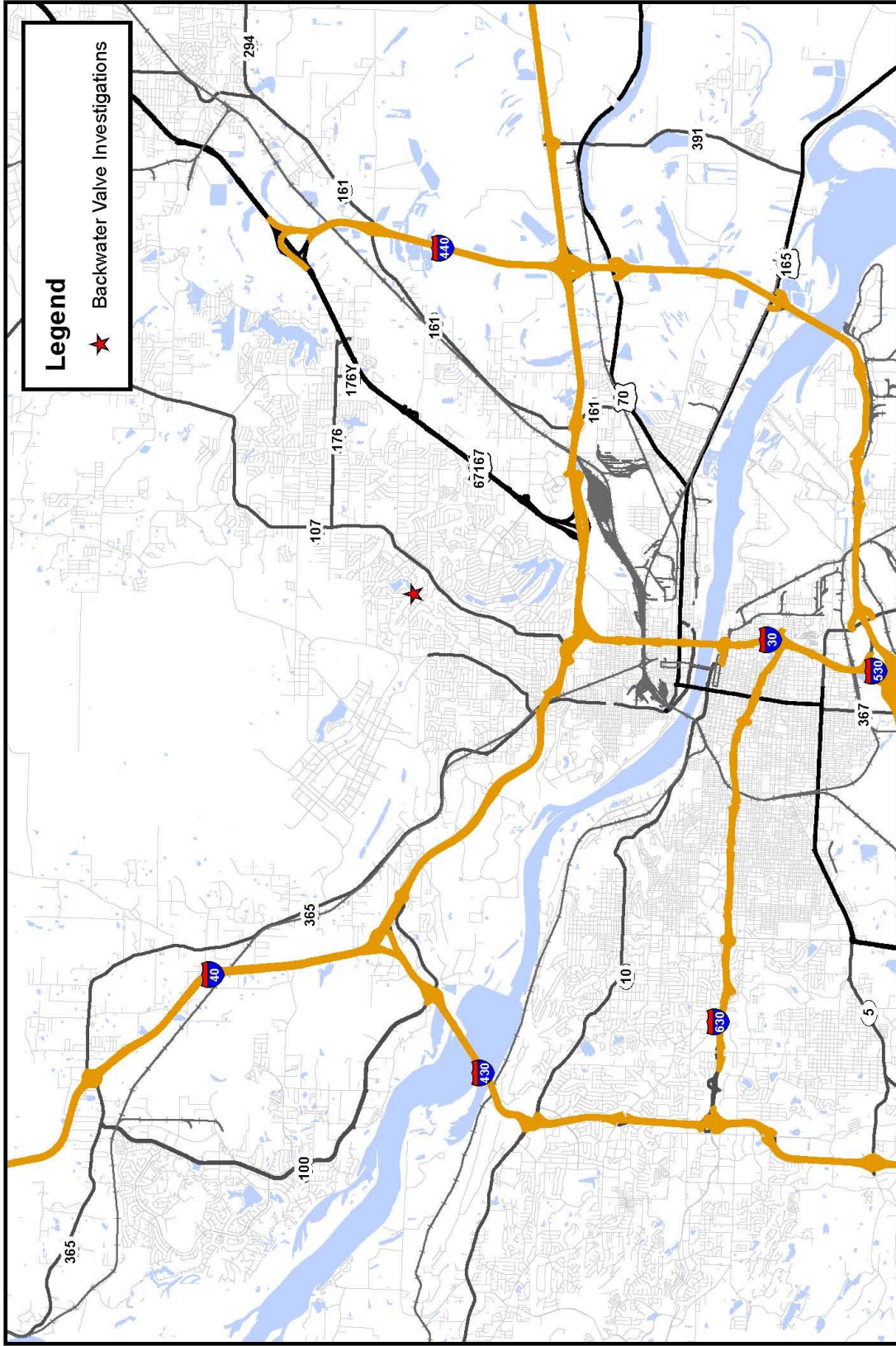
Treatment Plant Emergency Response Connections

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

- 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.



Legend
 ★ Backwater Valve Investigations

The data contained herein was compiled from various sources for the use and benefit of the North Little Rock, Arkansas, Water Utility. Rock Waste Water Utility is at the sole risk of the user, and by using this information, the user agrees to hold the City of 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 kind, including reasonable attorneys' fees, arising from the use of this data. The City of North Little Rock, including its staff, does not warrant the proper use of the data or use by another party. Acceptance or use of this data is done without any expressed or implied warranties.

North Little Rock Wastewater Backwater Valve Investigation - 2020



Printed 1/15/21

v. Public education –

In 2012, NLRW expanded the Grease Reduction Program to include additional items to ‘not’ put down the drain and named 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. COVID-19 did not allow for in-person education at the elementary schools after March of 2020.

Staff designed educational decals are 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
03/12/20	Lakewood Elementary	1800 Fairway North Little Rock, AR 72116	75
03/13/20	North Little Rock Government	Facebook page & website (What not to flush)	
10/13/20	North Little Rock Government	Facebook page & website (Do NOT flush pharmaceuticals)	

In each month, April, August and December 2020, 56,000 mailers were sent out with information on how to dispose of grease properly as well information on what to not put down the drain.

School children are given bracelets with the North Little Rock Wastewater Logo and the message "Protect Our Water." Also can lids which feature the North Little Rock Wastewater logo for disposal of grease and the message "Maintain your Drain" are given out with instructions on how to properly dispose of grease.

Informative brochures are handed out at all meetings with material on grease and pharmaceutical disposal.

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, 2020, North Little Rock Wastewater has spent \$18,589,916 of the \$30,000,000 loan.

viii. Point Repairs

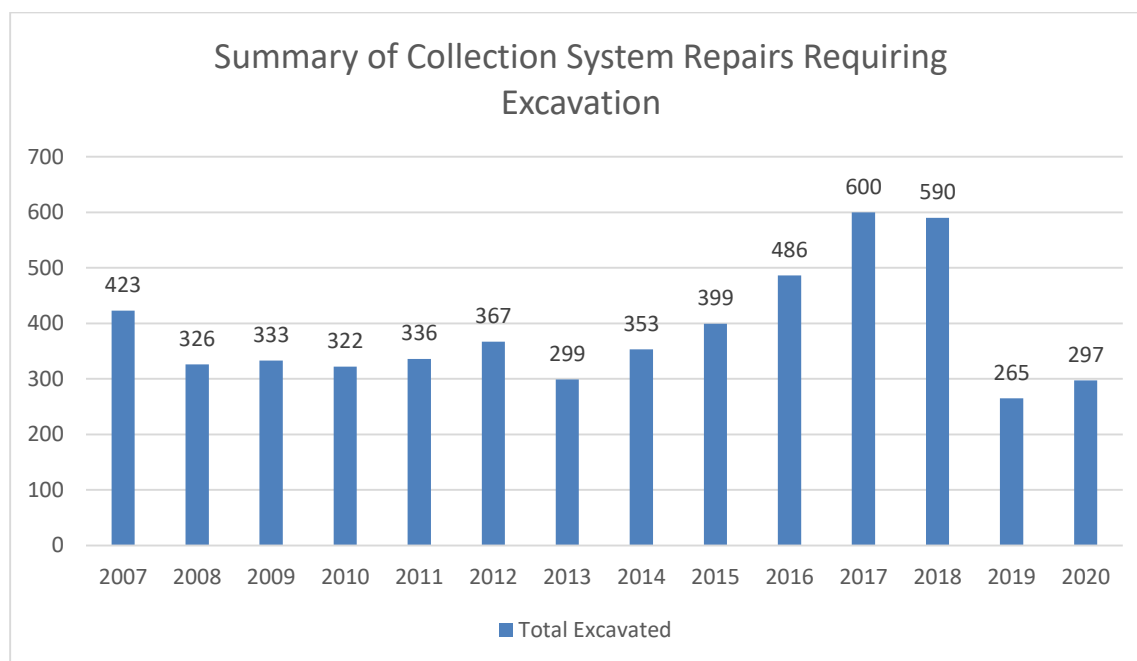
NLRW added a fourth construction crew in 2016 to reduce response time for disconnects which were building up a backlog of work orders. This crew may also assist with point repairs and other excavation related repairs depending on the work load.

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:

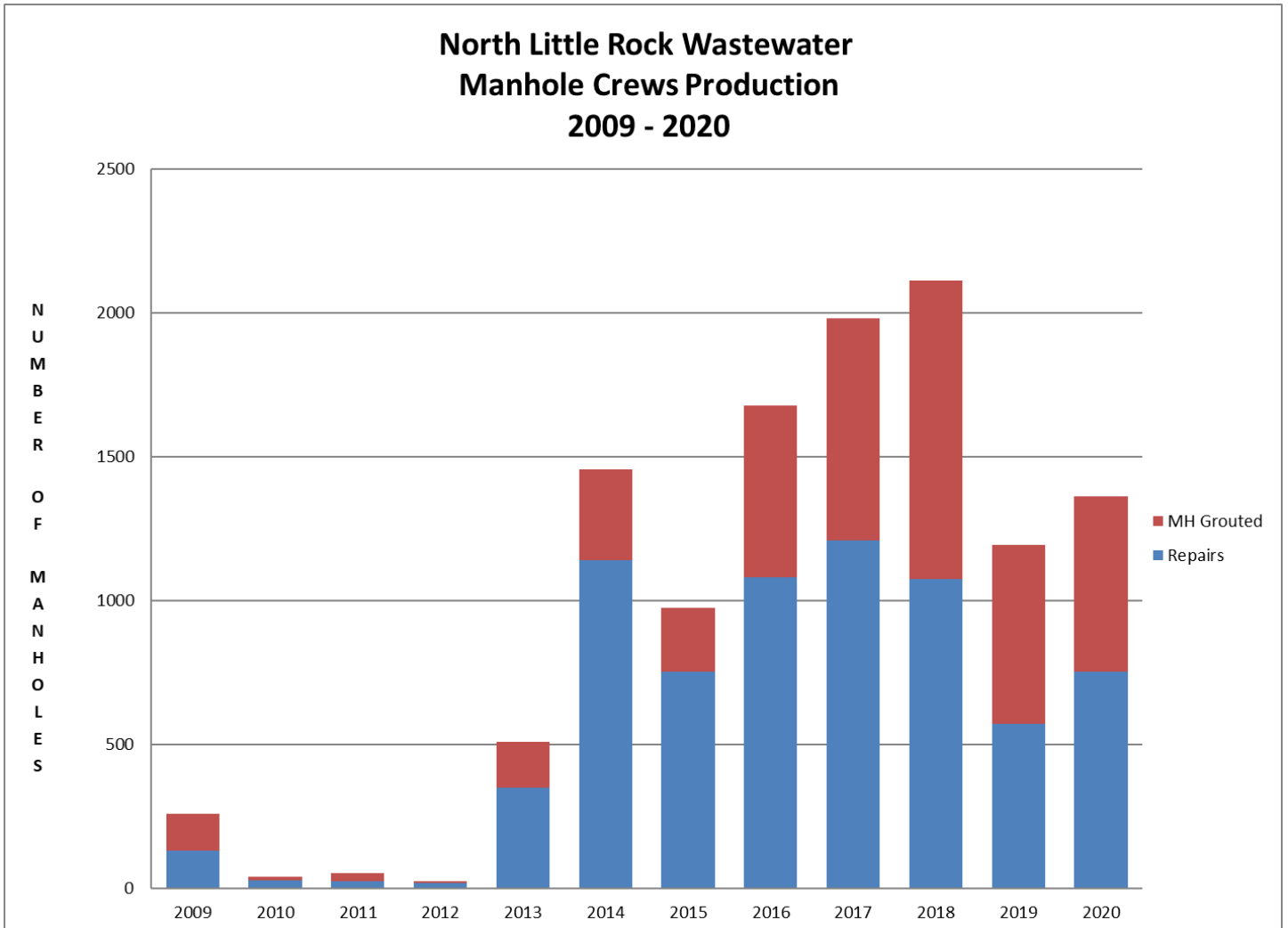
A summary of point repairs completed by the NLRW Collection Systems Department is included in Appendix C. *End of Year Work Recap Report*.

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 Services, Contractors</u>	<u>Total</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
2019	186	20	6	49	4	265
2020	209	49	3	34	2	297



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 "M. 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 2020

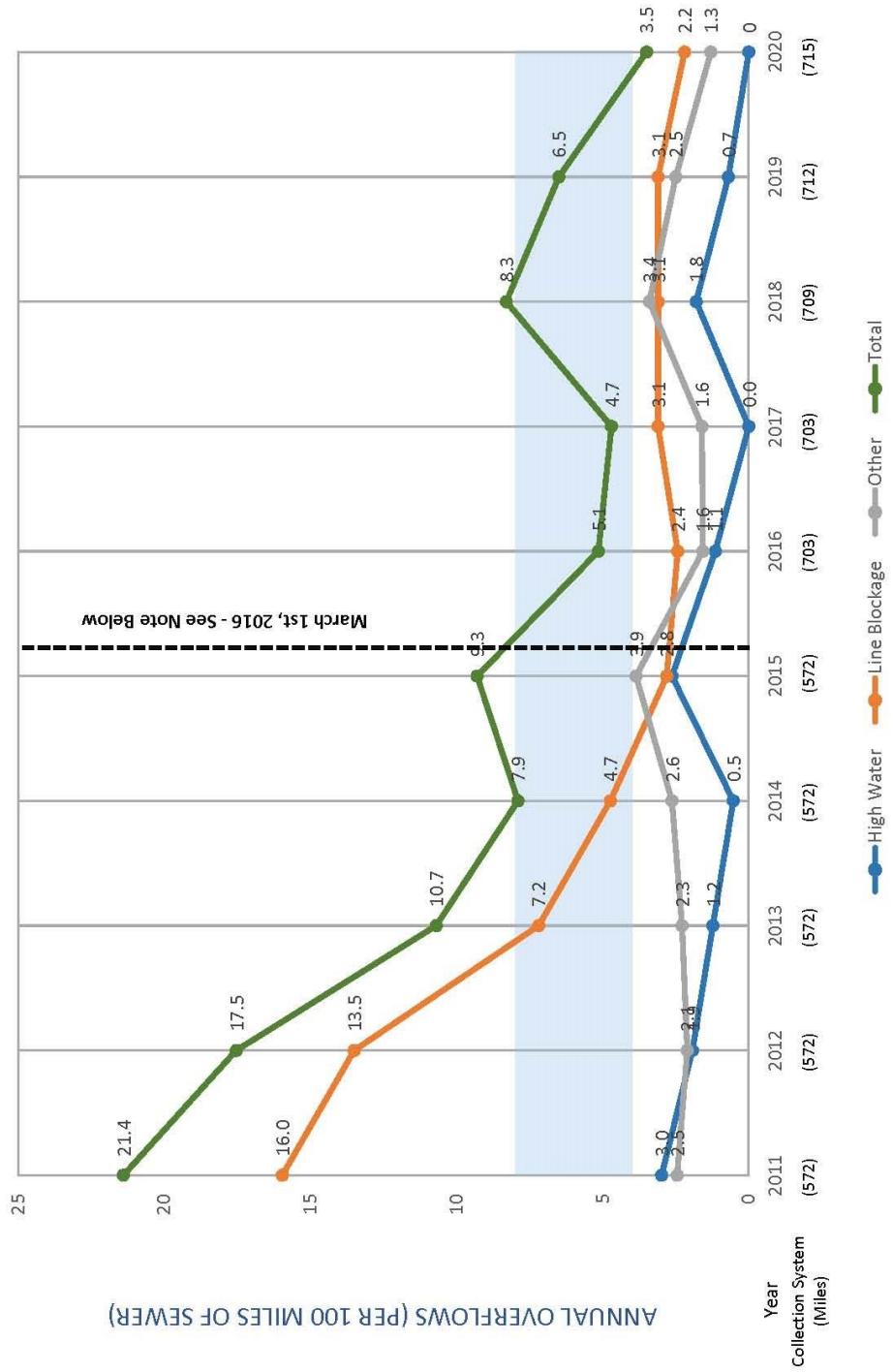
C. 2020 Year-to-Date Work Recap Report (Collection Systems Department)

D. Collection System Rehabilitation

E. Pictures

APPENDIX A

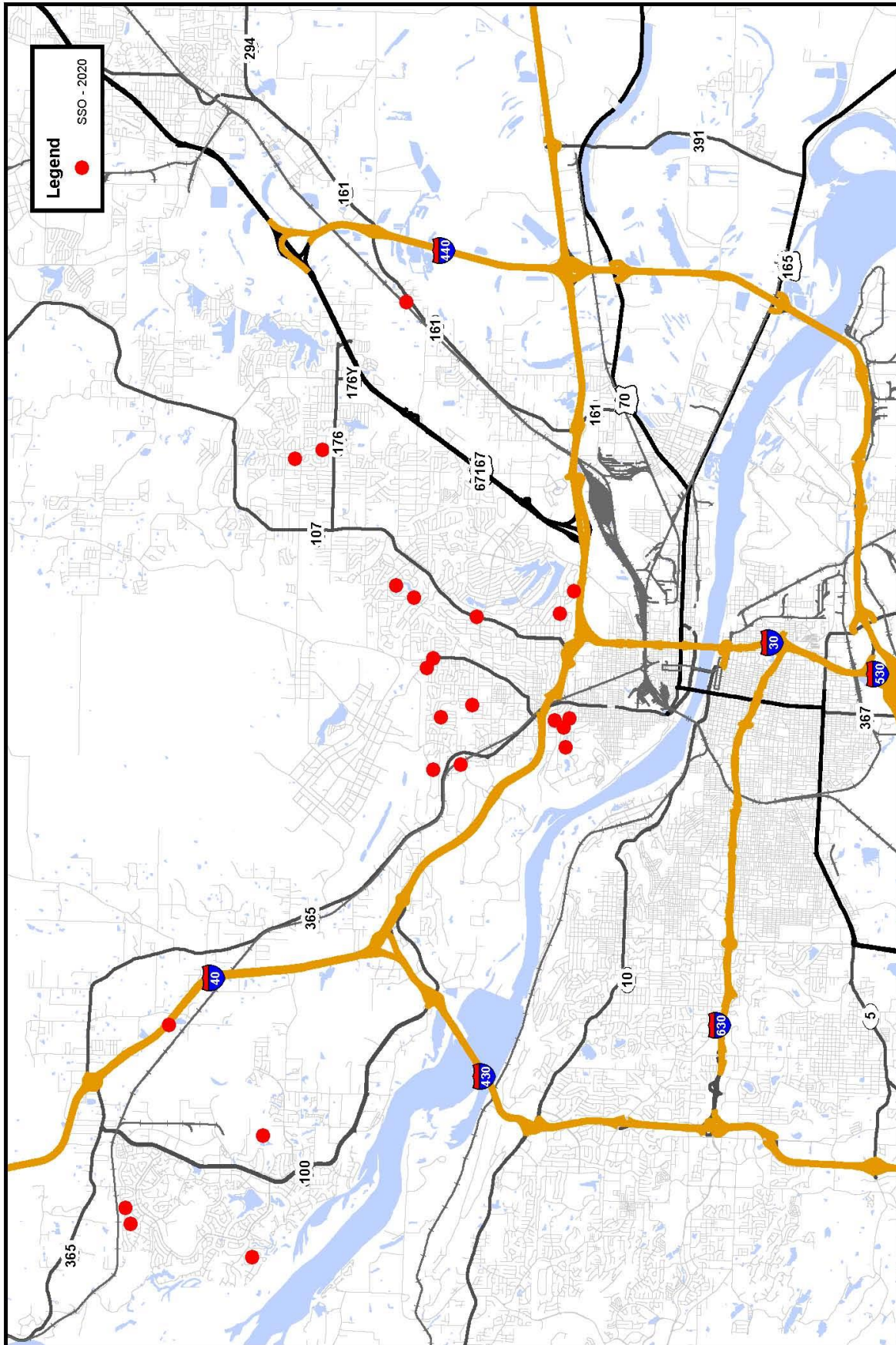
APPENDIX A
 ANNUAL OVERFLOWS BY CATEGORY (PER 100 MILES OF SEWER)
 NORTH LITTLE ROCK WASTEWATER



March 1st, 2016 - See Note Below

Note: On March 1st, 2016, the NLRW assumed O&M responsibilities of the Maumelle SID 500 of Pulaski County (d/b/a MWM).

APPENDIX B



APPENDIX B
SSO LOCATIONS - 2020
NORTH LITTLE ROCK WASTEWATER

The data contained herein was compiled from various sources for 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 the data, the user does hereby hold the North Little Rock Waste Water Utility harmless from any claims, costs, or damages of any kind and without liability from any claim, cost, or damages of any kind against the North Little Rock Waste Water Utility and the North Little Rock Waste Water Utility. Acceptance or use of this data is some without any expressed or implied warranties.



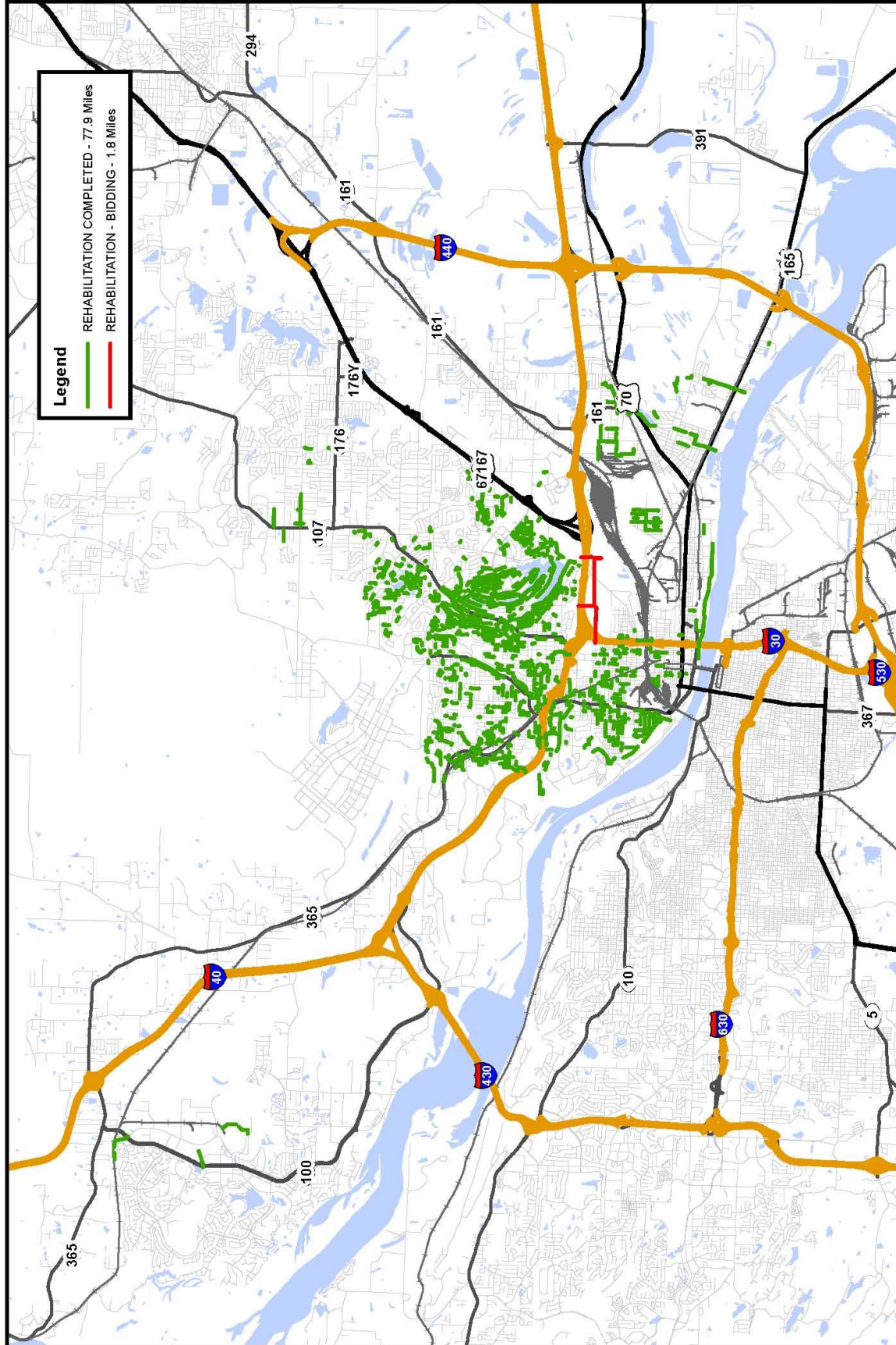
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APPENDIX C

North Little Rock Wastewater Utility 2020 Year-To-Date Work Recap Report

Crews:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y T D
MANHOLE:													
<i>Disconnects</i>	5	5	4	0	0	0	2	0	0	0	0	4	20
<i>Taps</i>	0	0	0	2	0	0	1	2	2	0	0	0	7
<i>Repairs</i>	39	81	76	90	73	93	85	53	61	40	34	29	754
<i># of MH's Grouted</i>	33	82	61	85	64	88	61	23	38	23	28	22	608
<i># of Coats</i>	66	164	122	170	128	176	122	46	76	46	49	44	1,209
<i>MH Depth (Ft/In)</i>	0.0	30.0	0.0	0	0.0	0.0	0	0	0.0	0.0	5.0	0.0	35
<i># of Bags of Grout</i>	2	27	15	10	4	5	3	2	5	18	17.5	18	126
POWER DRIVE:													
<i># of Ft Cleaned</i>	4,527	8,436	4,831	3,161	13,024	6,239	5,881	2,435	661	0	805	0	50,000
PWR RODDER #1:													
<i># of Ft Cleaned</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
REPAIR #1:													
<i>Repairs</i>	4	1	3	4	4	5	3	3	1	3	5	7	43
<i>New Manholes</i>	0	0	0	0	3	1	1	0	0	1	0	1	7
<i>New Lines</i>	0	1	0	0	0	0	0	0	0	0	0	0	1
<i>Disconnects</i>	0	0	0	2	0	0	0	0	0	0	0	0	2
<i>Taps</i>	0	0	0	0	0	0	0	0	0	0	3	2	5
<i>Miscellaneous</i>	1	6	13	3	7	4	3	2	9	2	4	2	56
REPAIR #2:													
<i>Repairs</i>	2	5	6	8	6	6	4	3	4	7	3	0	54
<i>New Manholes</i>	0	0	0	0	2	2	3	3	0	0	3	0	13
<i>New Lines</i>	0	0	0	0	1	0	0	0	0	0	0	0	1
<i>Disconnects</i>	0	0	1	1	0	1	0	0	0	0	0	0	3
<i>Taps</i>	0	0	0	1	2	0	0	0	1	0	2	0	6
<i>Miscellaneous</i>	5	8	7	5	6	6	8	4	10	9	2	3	73
REPAIR #3:													
<i>Repairs</i>	3	3	3	4	0	6	4	4	2	4	3	4	40
<i>New Manholes</i>	0	1	0	2	2	0	2	2	1	2	0	0	12
<i>New Lines</i>	0	0	1	0	0	0	0	0	0	0	0	0	1
<i>Disconnects</i>	1	0	1	3	0	0	0	0	0	0	0	0	5
<i>Taps</i>	0	0	0	2	0	2	0	0	1	0	1	0	6
<i>Miscellaneous</i>	4	4	6	1	11	6	2	4	1	4	2	4	49
REPAIR #4:													
<i>Repairs</i>	5	4	5	6	4	10	5	4	3	9	5	12	72
<i>New Manholes</i>	2	0	2	2	3	1	1	1	3	1	0	1	17
<i>New Lines</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Disconnects</i>	0	0	0	0	2	2	0	0	0	0	0	0	4
<i>Taps</i>	0	0	0	0	0	0	0	0	0	0	1	1	2
<i>Miscellaneous</i>	11	10	12	4	7	7	2	7	5	7	5	0	77
TROUBLE:													
<i># of Ft Cleaned</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Stop-Ups</i>	6	6	8	8	7	5	4	5	3	4	8	5	69
<i>Private Lines</i>	35	30	29	34	26	17	10	23	15	30	27	18	294
<i>Cave-Ins</i>	2	2	4	1	4	6	6	1	8	5	1	3	43
<i>Flooded Houses</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Miscellaneous</i>	47	44	34	76	71	74	68	74	69	66	57	55	735
<i>Total Calls</i>	90	82	75	119	108	102	88	103	95	105	93	81	1,141
VACCON #1:													
<i># of Ft Cleaned</i>	19,239	15,983	28,466	33,765	32,623	27,237	31,968	29,491	34,041	25,426	25,134	24,963	328,336
VACCON #2:													
<i># of Ft Cleaned</i>	11,901	11,562	40,419	33,355	45,423	36,481	43,199	0	35,501	30,823	22,477	24,607	335,748
VACCON #3:													
<i># of Ft Cleaned</i>	43,380	28,707	38,230	46,409	35,509	29,944	30,128	0	18,828	24,685	47,836	27,685	371,341
VACCON #4:													
<i># of Ft Cleaned</i>	36,916	1,911	0	2,930	0	0	0	0	0	0	0	0	41,757
VACCON #5:													
<i># of Ft Cleaned</i>	26,636	10,797	28,732	37,599	38,527	39,780	43,977	31,062	24,472	34,435	18,221	23,844	358,082
T V #1													
<i># of Ft</i>	16,584	16,511	24,438	23,914	22,240	19,994	11,712	21,540	18,558	18,422	15,440	17,970	227,323
T V #2													
<i># of Ft</i>	13,105	13,025	18,963	24,134	16,858	15,284	11,756	13,859	20,167	16,421	10,948	19,512	194,032

APPENDIX D



North Little Rock Wastewater Collection System Rehabilitation 2013 through 2020

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 and the City of North Little Rock, harmless to 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.

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APPENDIX E



Upper Riverside Interceptor CIPP – November 6, 2020



South Levy CIPP – January 8, 2020



South Levy Pipe Bursting – September 18, 2019



White Oak WRF All-Weather Access Rd – June 4, 2020



Upper Riverside Interceptor CIPP – October 27, 2020



Upper Riverside Interceptor CIPP – November 9, 2020



South Levy Pipe Bursting – September 18, 2019



Collection System Building – August 2020



Pollinator Garden at NLRW Faulkner Lake WRF – August 2020



Laboratory Building at NLRW Faulkner Lake WRF – July 2015



Operations Building at NLRW Faulkner Lake WRF – July 2015



CCTV Truck at NLRW Faulkner Lake WRF – July 2015



Vaccon Truck at NLRW Faulkner Lake WRF – July 2015



Point Repair on 24" Pipe near Arkansas River – July 2015