

North Little Rock Wastewater

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



2019 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.

(COVER PHOTO - Drone photo of aeration basins, parshall flume, influent pump station, and high water pump station at Faulkner Lake WRF taken June 3, 2019.)

North Little Rock Wastewater 2019 End of Year Report

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North Little Rock Wastewater

2019 End of Year Report

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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 2019 End of Year Report.

Milestone

#

Date

1. Wastewater Master Plan

A. Milestone Schedule

| | <u>Bute</u> | THIESEOFIC |
|---|---|--|
| • | 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. | DDO IFOT MAME | | % | DATE |
|-----------------|--|--------------|------------|------------|
| 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 |
| Maumelle | Maumelle/White Oak Diversion Project | \$16,000,000 | 50% Design | 12/31/2019 |
| | TOTAL\$ | \$27,620,966 | | |

ii. Pipeline Rehabilitation

Projects

| | | LINEAL | | % | |
|---|------------------|---------|--------------|-------------------|----------|
| PROJECT NAME | METHOD | FT | \$ | COMPLETE | DATE |
| Baring Cross Basin CIPP 2016 Rehabilitation | CIPP Pipe | 22,925 | \$1,808,523 | 100% | 11/17/18 |
| Baring Cross Basin Pipe Bursting 2016 Rehabilitation | Bursting | 51,026 | \$4,137,738 | 100% | 10/01/18 |
| W. Levy/212 Basin CIPP 2016 Rehabilitation | CIPP Pipe | 26,359 | \$1,763,351 | 99% | 12/31/19 |
| W. Levy/212 Basin Pipe Bursting 2016 Rehabilitation | 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 Pipe | 49,153 | \$2,882,300 | 63% | 12/31/19 |
| South Levy/Indian Hills Pipe Bursting 2017 Rehabilitation | Bursting Pipe | 39,108 | \$3,585,300 | 96% Under | 12/31/19 |
| Lakewood Pipe Bursting 2019 Rehabilitation Project | Bursting | 25,850 | \$1,988,834 | Contract | 12/31/19 |
| Lakewood CIPP 2019 Rehabilitation Project | CIPP | 21,829 | \$1,241,831 | Under Contract | 12/31/19 |
| | TOTAL | 272,156 | \$23,786,239 | | |

iii. Pump Station Projects

| | 1 | J | |
|---|----------------|------------|----------|
| 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 |
| TOTAL | \$ \$6,666,562 | | |

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 | \$4,796,835 | 100% | 12/31/17 |
| TOTAL \$ | \$7,706,835 | | |
| * Will be started following final stabilizati others. | on of the landsi | lide by | |

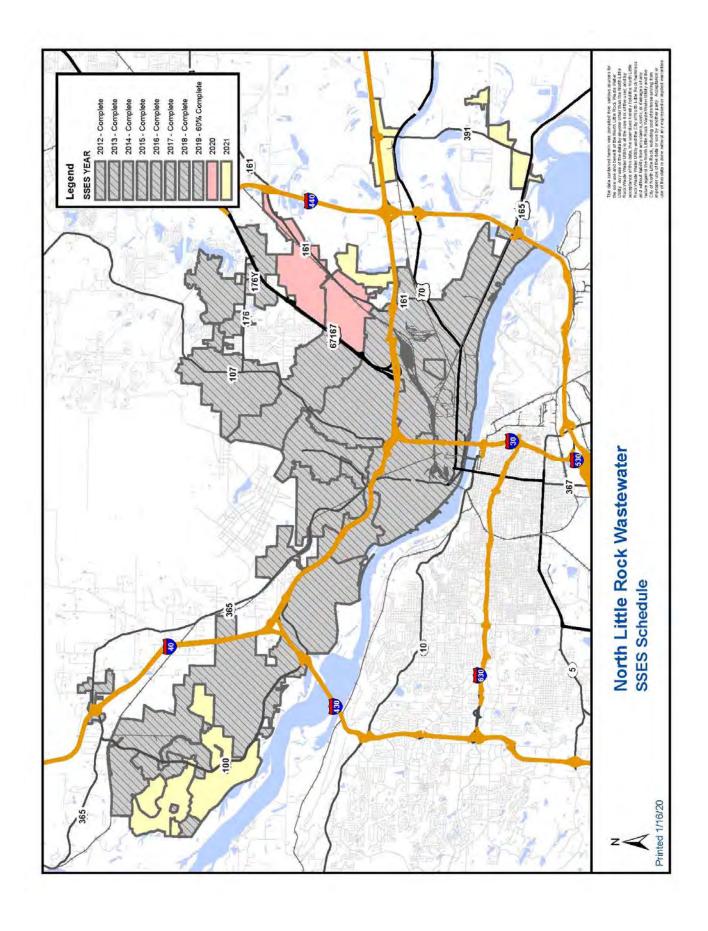
C. Sewer System Evaluation Survey (SSES)

Following is a summary of SSES fieldwork completed to date.

| | SUMMARY OF SSES FIELDWORK | | | | | | | | | | | |
|--|---------------------------|-------------|-------|-------------|--------------|-------|----------|---------|-------|-----------|--|--|
| | Smo | ke Testing | | Man | hole Inspect | ions | <u>[</u> | CCTV | | | | |
| Project Name | Quantity | Defects | I/I | Quantity | Defects | 1/1 | Quantity | Defects | I/I | Quantity | | |
| | <u>(LF)</u> | <u>(EA)</u> | (mgd) | <u>(EA)</u> | <u>(EA)</u> | (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 | 445,980 | | | 1,210 | | | 15 | | | | | |
| * System Wide | 2,951,385 | 4,305 | 6.054 | 11,409 | 12,513 | 6.537 | 358 | 265 | 6.603 | 2,692,532 | | |

| 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 | \$445,980 | 60% | 12/2019 |
| | | | |
| TOTAL | \$4,118,101 | | |

Following is a map delineating the schedule of SSES fieldwork.

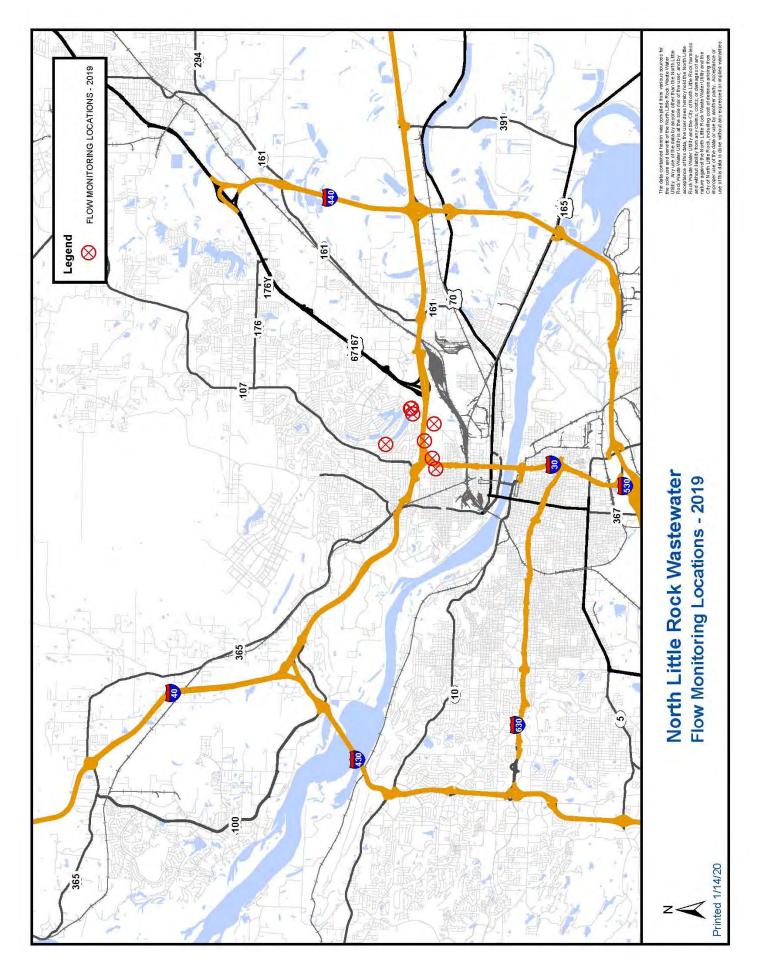


D. SSES, Pumping Station, Capacity Assessment, and Hydraulic Model Evaluation Report

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 noncapacity 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.



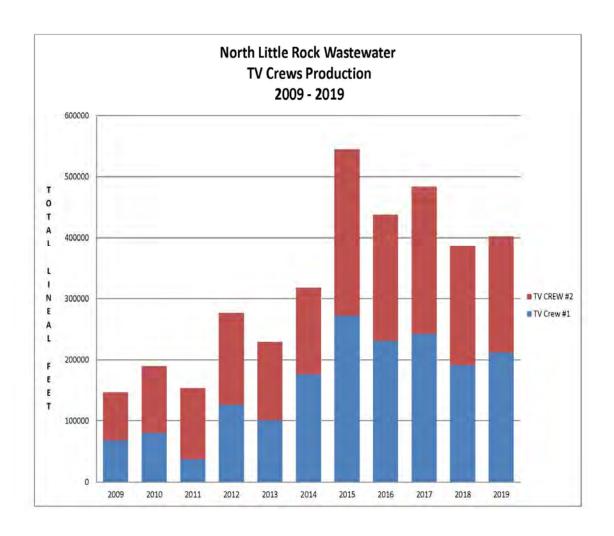
D. Collection System and Wastewater Treatment Plant Remedial Measures Plan

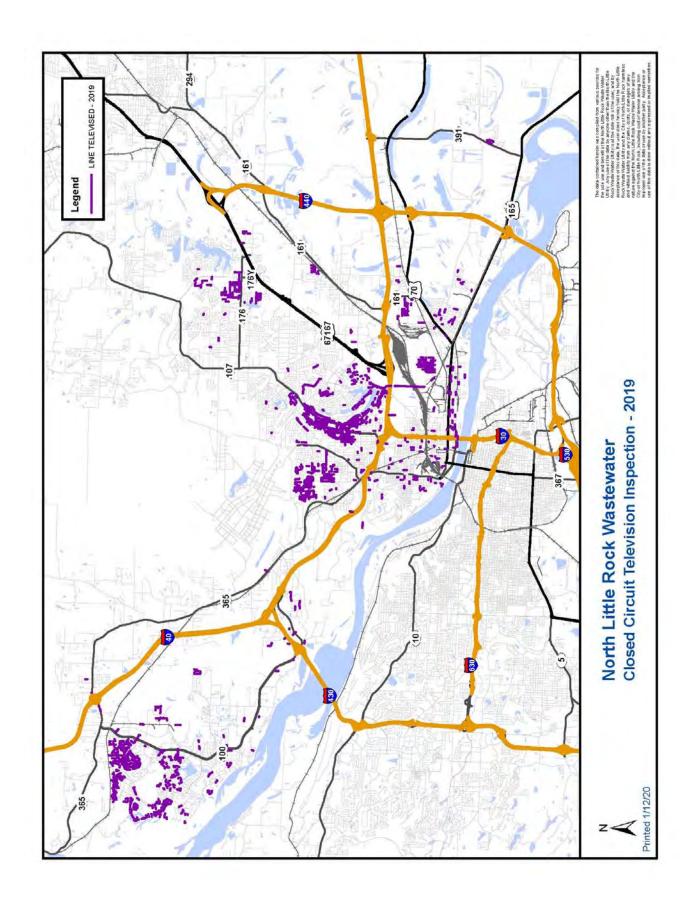
Following is an update of progress on specific collection system and WWTP Remedial Measures:

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

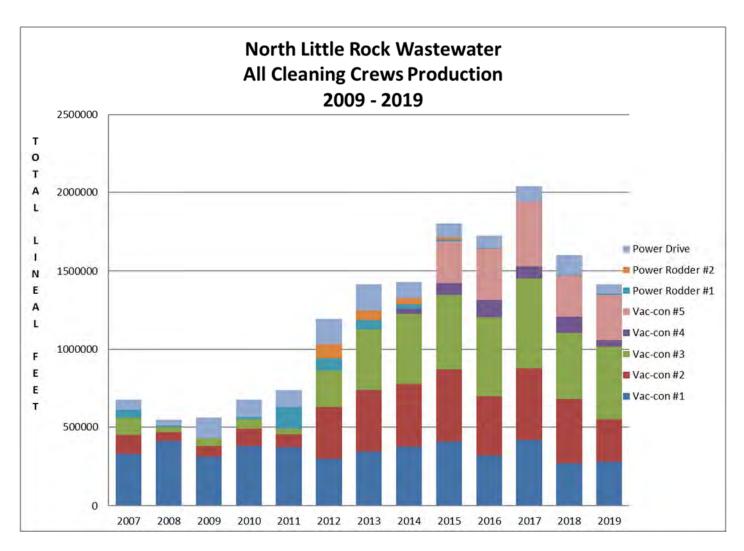
- i. Increase production of TV and cleaning crews
- a. The following graph and map document the efforts to increase production of the TV crews in targeted areas.

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.

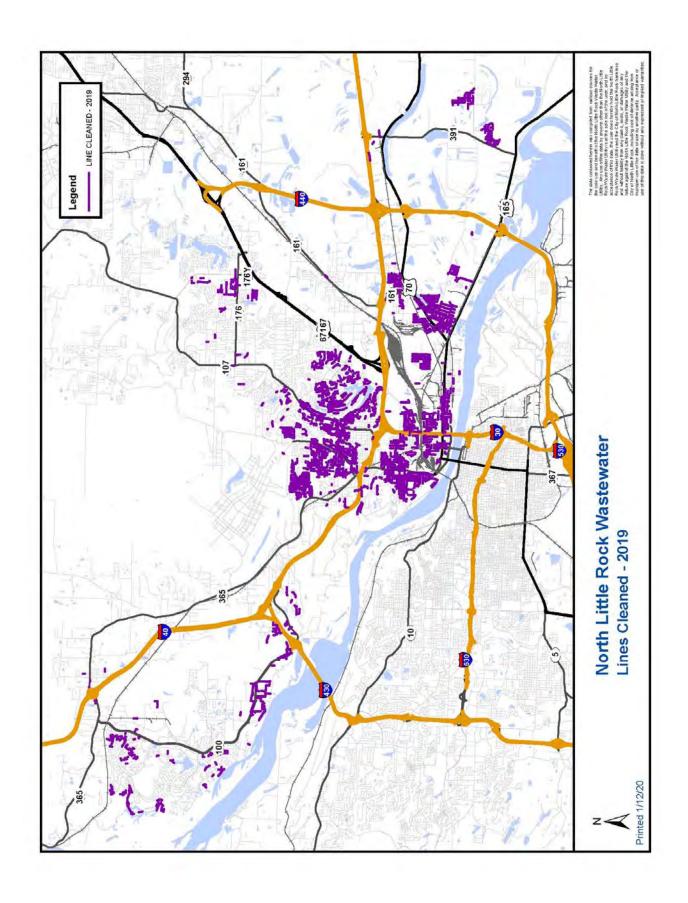




b. The following graph and map document the efforts to increase production of the cleaning crews in targeted areas.



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.

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.

| | LITTLE ROCK WASTEWATER PUI | | | 20, 0,102 00,1 | | EXISTING | 2000 |
|------------|--|--------------------|--------------------|----------------|------------------|----------------------|----------------|
| # | PUMP STATION NAME | PUMP CONNECTION | TRANSFER SWITCH | GENERATOR | VOLTS | SCADA TYPE | SCADA UNI # |
| 402 | BRIDGEWAY HOSPITAL #2 | Y | N | N | 230 1Ø | IGNITION | 3082 |
| 403 | CLAYTON CHAPEL | Υ - | AUTO | Y | 240 3Ø | IGNITION | 3082 |
| 405 | DELTA LAWN 3306 E. 10th | Y | AUTO | Y | 240 3Ø 240 3Ø | IGNITION IGNITION | 3028 |
| 407 | HWY 107 | Y | AUTO | Y | 240 3Ø | IGNITION | 3083 |
| 408 | LANSBROOK | Y | Manual | N | 240 3Ø | IGNITION | 3027 |
| 409 | MARYLAND EAST | Y | AUTO | Y | 240 3Ø | IGNITION | 3083 |
| 410 | MARYLAND PLACE | Y | N | N. | 240 1Ø | IGNITION | 3105 |
| 413 | COCK-OF-THE-WALK (#2) | Υ | N | N | 480 3Ø | IGNITION | 1115 |
| 414 | MAYBELLINE | Y | AUTO | Y | 480 3Ø | IGNITION | .3028 |
| 415 | MCALMONT | Y | N | N | 240 3Ø | IGNITION | 3105 |
| 416 | MID-STATE | Y | N | N . | 240 3Ø | IGNITION | 3107 |
| 417 | OAKBROOK | Y | N | N. | 480 3Ø | IGNITION | 1030 |
| 418 | PINE TREE | N | N | N Y | 240 1Ø 480 3Ø | IGNITION | 3108 |
| 419 | SHILLCUT SHORTER COLLEGE | N Y | AUTO N | N N | 480 3Ø 240 3Ø | IGNITION IGNITION | 3110 |
| 421 | BURNS PARK EAST | N | N N | N N | 240 3Ø | N/A | 3110 |
| 422 | BURNS PARK WEST | N | N | N | 240 3Ø | N/A | - |
| 423 | LAKEWOOD PLACE | N | N N | N | 230 1Ø | IGNITION | 3110 |
| 424 | I 440 INDUSTRIAL PARK | Y | N | N | 208 3Ø | IGNITION | 3028 |
| 425 | AUSTIN LAKE | Y | N | N | 480 3Ø | IGNITION | 3110 |
| 426 | FRONTIER DR MORGAN | Y | AUTO | Y | 480 3Ø | IGNITION | 3110 |
| 427 | MARCHE-MORGAN | Ý | N | N. | 480 3Ø | IGNITION | 3080 |
| 429 | BAUCUM INDUSTRIAL | Y | N | N | 208 3Ø | IGNITION | 3028 |
| 430 | WILCOX | Y | AUTO | Y | 480 3Ø | IGNITION | 3026 |
| 431 | QUAPAW | Y | AUTO | Y | 240 3Ø | IGNITION | 3028 |
| 432 | HWY 365SHERMAN RD | Y | AUTO | Y | 480 3Ø | IGNITION | 3081 |
| 433 | GAP CREEK | Y | AUTO | Y | 240 3Ø | IGNITION | 3080 |
| 434 | HARRIS INDUSTRIAL PARK | Y | N | N | 480 3Ø | IGNITION | 3026 |
| 435 | BURNS PARK RV PARK | N | N | N | 240 1Ø | N/A | |
| 436 | BURNS PARK LANDSCAPING | N N | N N | N N | 240 1Ø | N/A | |
| 437 | BURNS PARK SOUTH HILL LAKE | N N | AUTO | N. Y | 240 1Ø 480 3Ø | N/A IGNITION | 3028 |
| 439 | BURNS PARK SOCCER FIELDS | N | N | N | 230 1Ø | N/A | .3020 |
| 440 | COLLINS INDUSTRIAL PARK | Y | AUTO | Y | 480 3Ø | IGNITION | 3056 |
| 441 | COUNTS MASSIE | Y | AUTO | Y | 480 3Ø | IGNITION | 3080 |
| 442 | CHAPEL RIDGE | Y | N | N. | 240 3Ø | IGNITION | 3056 |
| 443 | RIXIE PUMP -HWY 161 | Υ | AUTO | Υ | 480 3Ø | IGNITION | 3055 |
| 444 | RIXIE PUMP-LUCKY DR. | Y | AUTO | Y | 480 3Ø | IGNITION | 3055 |
| 445 | RIXIE PUMP- TRAMMEL RD | Υ | AUTO | Y | 480 3Ø | IGNITION | 3055 |
| 446 | RIXIE PUMP-RIXIE RD- RR TRACK | Y | N | N | 480 3Ø | IGNITION | 3055 |
| 447 | CYPRESS CROSSING | Y | AUTO | Y | 480 3Ø | IGNITION | 3026 |
| 448 | CRYSTAL BAY | Υ. | N | N | 480 3Ø | IGNITION | 3080 |
| 449 | TRAMMEL ESTATES | Y | N | N | 240 1Ø | IGNITION | 3055 |
| 450 | EUREKA GARDEN & 46TH | Υ | AUTO | Υ | 240 3Ø | IGNITION | 3056 |
| 451 | EUREKA GARDEN RD | Y | AUTO | Y | 240 3Ø | IGNITION | 3055 |
| 452 453 | EUREKA GARDEN & JUDY LANE FAULKNER CROSSING 5 | Y | Manual AUTO | N | 240 3Ø 480 3Ø | IGNITION IGNITION | 3055 3028 |
| 601 | BOURIES | N | N | N | 230 1ø | IGNITION | 1071 |
| 602 | C.C. BALLFIELDS | Y | AUTO | Y | 480 3Ø | IGNITION | 1057 |
| 603 | COUNTS MASSIE #2 | N | N | N. | 230 3ø | IGNITION | 1102 |
| 604 | DIAMOND POINT | N | N | N | 480 3Ø | IGNITION | 1120 |
| 605 | DURANGO | N | N | N. | 460 3Ø | IGNITION | 1118 |
| 606 | HIGH SCHOOL | N | N | N | 480 3Ø | IGNITION | 1117 |
| 607 | LAWRENCE | N | N | N | 230 1ø | IGNITION | 1102 |
| 608 | MARANES | N | N | N. | 230 1ø | IGNITION | 1100 |
| 609 | MASTERS PLACE | N | N | N | 230 1ø | IGNITION | 1102 |
| 610 | MAUMELLE VALLEY | Y | AUTO | Y | 480 3Ø | IGNITION | 1101 |
| 611 | MAUMELLE WOODS | N | N | N | 480 3Ø | IGNITION | 1114 |
| 613 614 | MURPHY DRIVE NAYLOR | N N | AUTO N | Y N | 460 3Ø 480 3Ø | IGNITION IGNITION | 1113 |
| 615 | NEW BEDFORD | N | N N | N. | 480 3Ø | IGNITION | 1113 |
| 616 | NORFOLK | N | N | N . | 230 1ø | IGNITION | 1119 |
| 617 | ODOM/BLUE MOUNTAIN | N | N | N | 230 1¢ | IGNITION | 1114 |
| 618 | OSAGE FALLS | Y | AUTO | N | 230 3ø | IGNITION | 1115 |
| 619. | OSAGE HILLS | N | MANUAL | N | 230 3ø | IGNITION | 1115 |
| 620 | PALASADES | N | N N | N | 480 3Ø | IGNITION | 1113 |
| 621 | PONCA | N | N | N | 230 3ø | IGNITION | 1119 |
| 622 | RIDGELAND | N | N | N | 230 1ø | IGNITION | 1102 |
| 623 | RIDGELAND/ODOM | N | N | N | 230 1ø | IGNITION | 1117 |
| 624 | RIVER RUN | N | N | N | 230 3ø | IGNITION | 1118 |
| 625 | SEMINOLE EAST | Υ | AUTO | Υ | 460 3Ø | IGNITION | 1033 |
| | SEMINOLE WEST | Y | AUTO | Y | 230 1ø | IGNITION | 1119 |

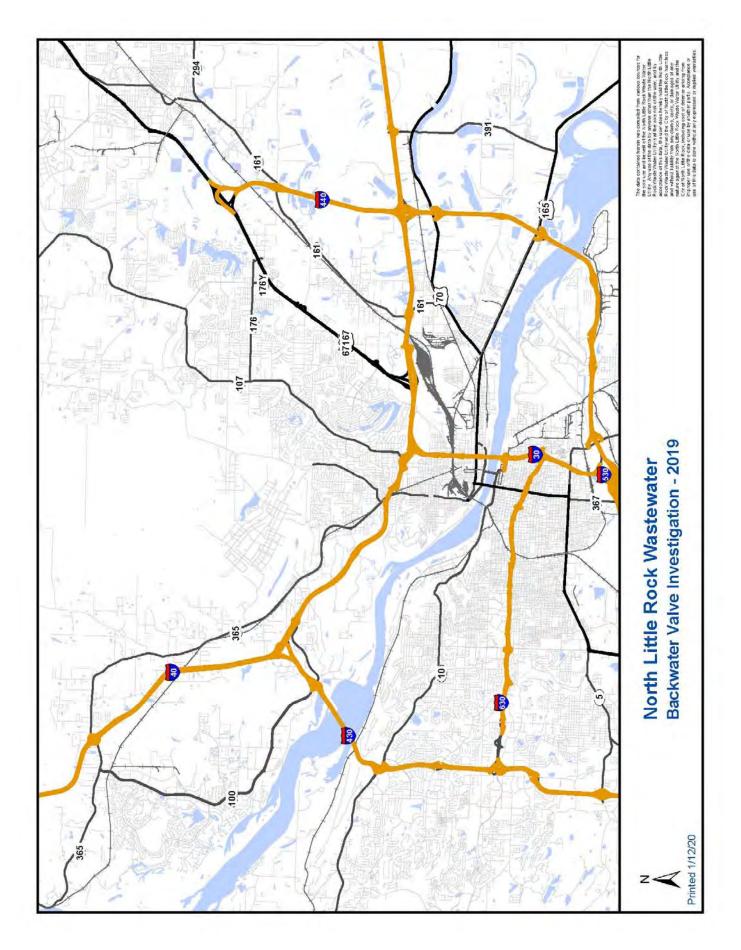
Treatment Plant Emergency Response Connections

| | | PUMP | TRANSFER | | | EXISTING |
|-------------------------------|--------------------|------------|----------|-----------|-----------|------------|
| TREATMENT PLANT NAME | LOCATION | CONNECTION | SWITCH | GENERATOR | VOLTS | 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 | Υ | 240V 480V | IGNITION |
| WHITE OAK INFLUENT | 6000 HEILMAN | N | Υ | Ν | 480 3Ø | IGNITION |
| WHITE OAK TREATMENT PLANT | 6000 HEILMAN | N | N | N | 480 3Ø | IGNITION |
| FIVE MILE INFLUENT | 5601 E 54TH STREET | N | AUTO | Υ | 480 3Ø | IGNITION |
| FIVE MILE EFFLUENT | 5601 E 54TH STREET | N | AUTO | Υ | 480 3Ø | IGNITION |
| MAUMELLE TREATMENT PLANT | 425 HYMAN DRIVE | N | AUTO | Y | 480 3Ø | IGNITION |

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 – Expanded Program 2019

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."

During 2019 the mailers were all redesigned and are sent out periodically included with Central Arkansas Water monthly bills. The Nov/Dec issue of NLR Neighborhood News front page was entirely devoted to the campaign.

A summary of the activities conducted by the "Maintain YOUR Drain" staff, during the calendar year is attached, as well as copies of the new 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 |
|--------------|-----------------------------|--|-------------------------------|
| 01/26/19 | CAC | 6101 JFK Blvd, NLR, AR 72116 | 25 |
| 01/28/19 | New Life Christian | 12506 Highway 165, NLR, AR 72117 | 25 |
| 04/04/19 | Givens Company (apartments) | 5 complexes in NLR & Sherwood area | 350 |
| 04/26/19 | Tamberly MacIntyre | Jefferson Manor apartments | 150 |
| NOV/DEC 2019 | NLR NEIGHBORHOOD NEWS | DISTRIBUTION TO CITIZENS | 1800 |
| | | Total Individual Distribution of Information | 2350 |

April-2019 61,500 Mailers were sent out with proper disposal information as related to wastewater.

August-2019 61,500 Mailers were sent out with proper disposal information as related to wastewater.

December-2019 61,500 Mailers were sent out with proper disposal information as related to wastewater.

School children are given bracelets with the North Little Rock Wastewater Logo and the message "Protect Our Water." Also can lids with North Little Rock Wastewater Logo 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.

DON'T FLUSH THAT FLOSS! NO DRUGS DOWN THE DRAIN! **NO WIPES IN YOUR PIPES!**



501-945-7186



WWW.NLR.AR.GOV

DON'T FLUSH FLOSS

WIPES CLOG PIPES

SHOULD BE DISPOSED IN

USED DENTAL FLOSS

IN THE SEWER DOES NOT

DEGRADE LIKE TOILET

PAPER. FLOSS WILL

OILET PAPER. THEY WILL

NOT DEGRADE LIKE

CAUSE BLOCKAGES IN

SEWER PIPES AND RESULT IN COSTLY

REPAIRS.

PUMP EQUIPMENT AND WRAP AROUND SEWER

CAUSE SIGNIFICANT

DAMAGE.

THE TRASH CAN. FLOSS

OR MAKEUP REMOVAL PADS. THESE ITEMS DO

WIPES, PAPER TOWELS

NEVER FLUSH BABY

PLANTS ARE NOT DESIGNED CHEMICALS MAY REMAIN IN THE WATER AND HARM WASTEWATER TREATMENT TAKE-BACK PROGRAM MEDICINES. HARMFUL WILDLIFE. CONTACT **ENFORCEMENT FOR** COMMUNITY DRUG TO TREAT UNUSED LOCAL LAW

NO MEDICINES

DETAILS.

CEASE THE GREASE

POUR USED GREASE INTO NEVER POUR GREASE OR WILL SOLIDIFY, CAUSING GARBAGE DISPOSAL. IT YOUR SEWER TO BACK UP OR DRAIN SLOWLY. COOKING OIL DOWN YOUR SINK DRAIN OR A CAN. STORE IN FREEZER. WHEN FULL PLACE INTO THE

MAINTAIN YOUR DRAIN



North Little Rock Wastewater Reminds You To Maintain Your Drain



What do you do with your used cooking oil and grease after you are done with it? Do you pour it down the drain? What about scraps from your plate? Do you put them down the garbage disposal? Fats, oils and greases solidify when cool; this is just one reason why you should consider never pouring grease or food down the drain or garbage disposal. After time, the grease can build up and cause blockages in sewer pipes. Blockages can lead to sanitary sewer overflows and can also cause the sewer to back up into homes. The proper way to dispose of grease, fats and oils is to pour them into

a container and freeze it. Once frozen, the container can be placed into the trash. For disposal of large amounts of cooking oil, contact North Little Rock Public Works at (501)371-8345.



You should never flush paper towels, baby wipes, facial wipes, and other "flushable" wipes down the toilet. These products do not break down like toilet paper and can eventually cause blockages in sewer pipes and result in costly repairs.



Flushing dental floss down the toilet might seem like it's not worth mentioning, but floss in the sewer system can do a lot of damage. Dental floss is a fairly tough and impermeable product that can wrap around sewer pump equipment and can cause serious damage. Used dental floss should be disposed of in the garbage.



Pharmaceuticals in wastewater have become an ever-increasing problem. Wastewater treatment plants are not designed to treat unused medications, hypodermic needles and cigarette butts. These items release undesirable and potentially damaging chemicals into the wastewater treatment system. Many drugs pass through treatment plants and make their way into surface, ground, and bodies of waters. Harmful chemicals may remain in the water and can potentially harm wildlife and aquatic life. There are more than 200

medical drop-box locations throughout the state and Arkansas law-enforcement agencies host Arkansas Prescription Drug Take Back Day events twice a year at various locations. NLR Courts building offers a drug drop off site. Check www.artakeback.org for more information.

If you have any questions regarding how to maintain your drain, contact North Little Rock Wastewater at (501)945-7186 ext. 117.

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 \$10,786,227of the \$30,000,000 loan.

viii. Point Repairs

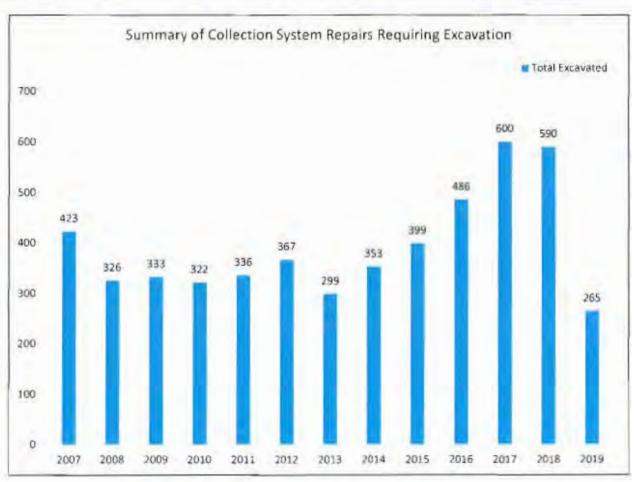
NLRW added a fourth construction crew in 2016 to reduce response time for disconnects which were building up a backlog of work orders. This crew may also assist with point repairs and other excavation related repairs depending on the work load.

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:

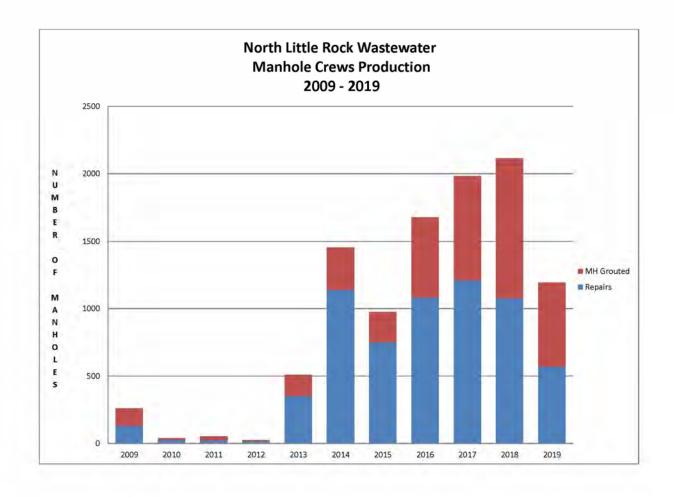
A summary of point repairs completed by the NLRW Collection Systems Department is included in Appendix C. *End of Year Work Recap Report*.

| Year | Point Repairs | New Manholes | New Line Segments | Disconnects | Repairs by Outside Services, Contractors | Total |
|------|------------------|-----------------|----------------------|-------------|--|-------|
| 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 |



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,

Marc E. Wilkins, PE

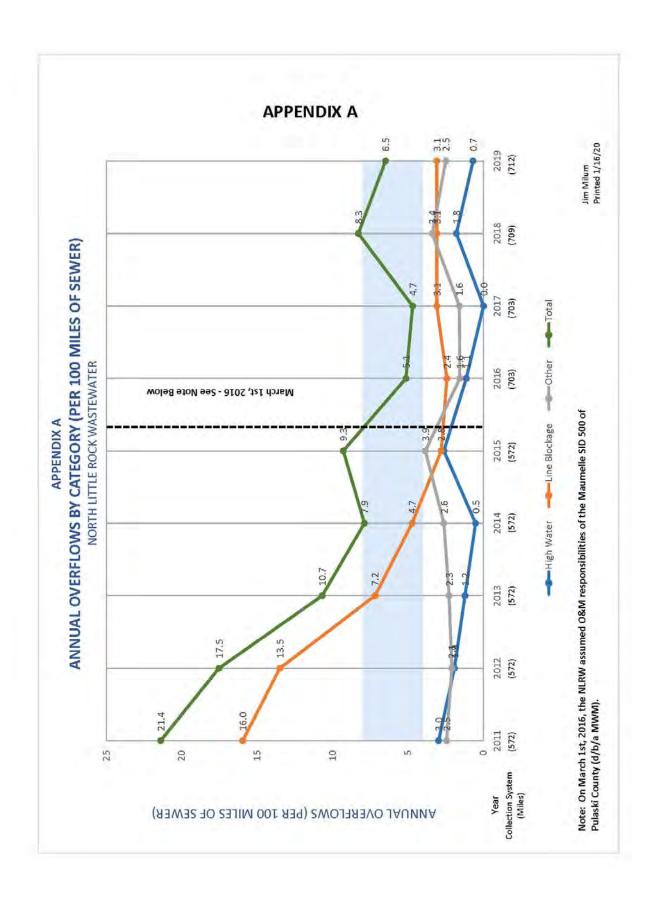
Director

North Little Rock Wastewater

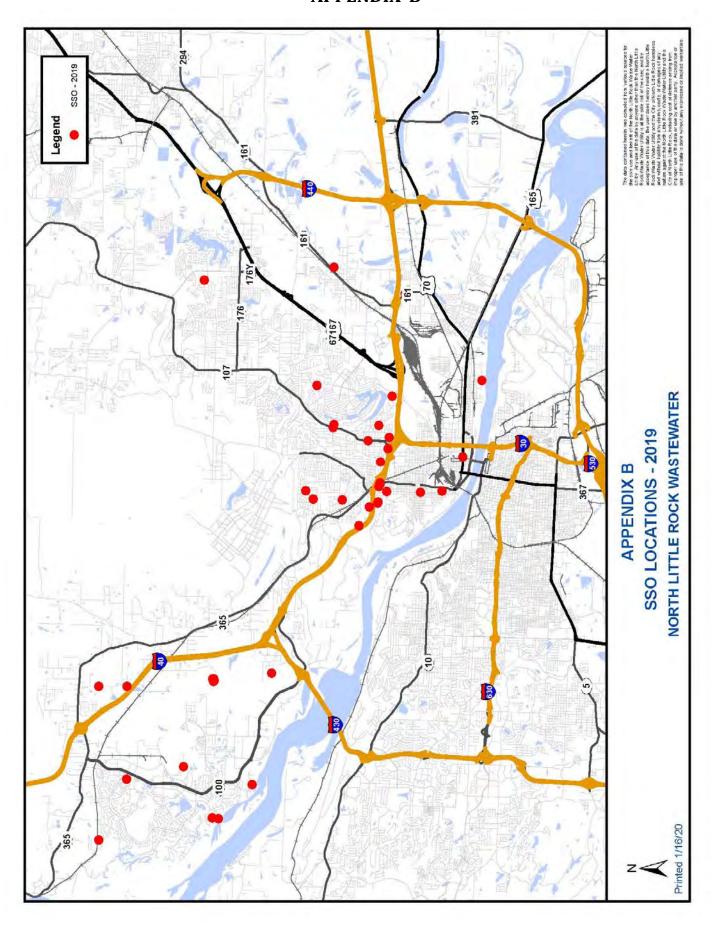
MZhill -

APPENDIX

- A. Annual Overflows by Category
- **B. SSO Locations 2019**
- C. 2019 Year-to-Date Work Recap Report (Collection Systems Department)
- D. Collection System Rehabilitation



APPENDIX B



APPENDIX C

North Little Rock Wastewater Utility

| | 2019 Year-To-Date Work Recap Report | | | | | | | | | | | | |
|---------------------------|-------------------------------------|---------|---------|----------|---------|---------|---------|---------|---------|---------|----------|---------|--------------|
| Cuarras | T | | | | | | | | - | 0.4 | NT | D | \$7 (E) \$5. |
| Crews: | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| MANHOLE: | | | | | | | | | | | | | |
| Disconnects | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Taps Repairs | 113 | 108 | 85 | 87 | 96 | 21 | 11 | 17 | 6 | 2 | 2 | 23 | 571 |
| # of MH's Grouted | 110 | 101 | 78 | 79 | 97 | 20 | 9 | 26 | 23 | 34 | 22 | 23 | 622 |
| #of Coats | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 26 | 23 | 66 | 44 | 46 | 214 |
| MH Depth (Ft/In) | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 42 | 104 | 39.0 | 33.0 | 0.0 | 0.0 | 218 |
| # of Bags of Grout | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 35 | 4 | 20 | 23 | 17 | 103 |
| POWER DRIVE: | | | | | | | | | | | | | |
| # of Ft Cleaned | 7,941 | 9,447 | 3,176 | 1,960 | 5,283 | 1,782 | 1,386 | 1,079 | 2,653 | 7,344 | 9,467 | 8,269 | 59,787 |
| PWR RODDER #1: | | | | | | | | | | | | | |
| # of Ft Cleaned | 1,133 | 3,510 | 0 | 599 | 1,402 | 0 | 136 | 0 | 0 | 0 | 0 | 0 | 6,780 |
| REPAIR #1: | | | | | | | | | | | | | |
| Repairs | 5 | 1 | 5 | 6 | 5 | 2 | 3 | 4 | 3 | 1 | 1 | 1 | 37 |
| New Manholes | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| New Lines | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Disconnects | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 4 |
| Taps Miscellaneous | 17 | 26 | 17 | 12 | 8 | 5 | 5 | 8 | 9 | 6 | 5 | 3 | 121 |
| REPAIR #2: | | 20 | - 2 | | , | | | | | Ť | | | 141 |
| Repairs | 8 | 5 | 7 | 10 | 3 | 5 | 2 | 6 | 3 | 4 | 4 | 3 | 60 |
| New Manholes | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 |
| New Lines | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Disconnects | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Taps | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Miscellaneous | 16 | 15 | 16 | 12 | 10 | 13 | 1 | 13 | 11 | 2 | 9 | 2 | 120 |
| REPAIR #3: | 1 | | | | | | | | | | | | |
| Repairs | 6 | 4 | 7 | 6 | 6 | 5 | 6 | 2 | 4 | 4 | 3 | 3 | 56 |
| New Manholes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 4 |
| New Lines | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Disconnects Taps | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Miscellaneous | 13 | 12 | 9 | 6 | 4 | 13 | 3 | 9 | 5 | 4 | 1 | 6 | 85 |
| REPAIR #4: | 15 | 12 | | | | 15 | | | | | | Ů | 65 |
| Repairs | 3 | 2 | 3 | 9 | 0 | 0 | 0 | 7 | 4 | 2 | 2 | 1 | 33 |
| New Manholes | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 6 |
| New Lines | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Disconnects | 15 | 9 | 5 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 47 |
| Тарѕ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Miscellaneous | 12 | 17 | 22 | 26 | 22 | 0 | 117 | 56 | 15 | 17 | 9 | 5 | 318 |
| TROUBLE: | | | | | | | | | | | | | |
| # of Ft Cleaned | 240 | 0 | 0 | 0 | 150 | 175 | 0 | 310 | 0 | 0 | 0 | 0 | 875 |
| Stop-Ups Private Lines | 11 37 | 9 40 | 9 37 | 15 54 | 5 37 | 3 18 | 3 13 | 7 17 | 2 14 | 9 36 | 10 15 | 6 28 | 89 346 |
| Cave-Ins | 3 | 7 | 4 | 9 | 3 | 2 | 2 | 12 | 7 | 2 | 3 | 2 | 56 |
| Flooded Houses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous | 62 | 38 | 64 | 71 | 64 | 73 | 79 | 68 | 43 | 49 | 64 | 35 | 710 |
| Total Calls | 111 | 93 | 114 | 149 | 109 | 96 | 97 | 104 | 66 | 96 | 92 | 71 | 1,198 |
| VACCON #1: | | | | | | | | | | | | | |
| # of Ft Cleaned | 19,847 | 20,690 | 18,200 | 25,489 | 30,975 | 23,322 | 34,316 | 19,772 | 24,298 | 26,889 | 18,370 | 17,782 | 279,950 |
| VACCON #2: | | | | | | | | | | | | | |
| # of Ft Cleaned | 33,897 | 16,494 | 28,637 | 24,988 | 21,475 | 23,384 | 7,978 | 3,831 | 33,462 | 25,799 | 31,398 | 17,456 | 268,799 |
| VACCON #3: | | | | | | | | | | | | | |
| # of Ft Cleaned | 39,512 | 48,015 | 47,885 | 33,411 | 45,767 | 32,674 | 36,744 | 35,075 | 37,401 | 41,236 | 36,928 | 32,917 | 467,565 |
| VACCON #4: | | | | | | | | | | | | | |
| # of Ft Cleaned | 3,493 | 956 | 0 | 0 | 1,220 | 8,108 | 6,486 | 2,173 | 8,211 | 5,877 | 0 | 4,503 | 41,027 |
| VACCON #5: | | | | | | | | | | | | | |
| # of Ft Cleaned | 25,093 | 24,945 | 24,834 | 22,051 | 31,629 | 10,316 | 27,065 | 20,991 | 16,301 | 31,181 | 28,493 | 25,552 | 288,451 |
| T V #1 | | | | | | | | | | | | | |
| # of Ft | 19,499 | 12,261 | 11,624 | 16,368 | 28,399 | 18,906 | 23,452 | 13,942 | 15,526 | 22,989 | 12,771 | 17,044 | 212,781 |
| T V #2 | | | | | | | | | | | | | |
| # of Ft | 14,552 | 13,564 | 17,965 | 15,838 | 18,815 | 17,597 | 17,770 | 11,895 | 17,888 | 11,868 | 19,891 | 12,000 | 189,643 |
| | | | | | | | | | | | | | |

APPENDIX D

