



# BENTON UTILITIES

## BENTON, ARKANSAS

January 19, 2023

Leslie Allen-Daniel, Enforcement Coordinator  
Office of Water Quality / Enforcement Section  
Division of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118

RECEIVED

JAN 20 2023

HG 10:43am

RE: NPDES Permit No. AR0036498, AFIN 63-00063  
CAO LIS 11-069 / SSES Review

Dear Ms. Allen-Daniel,

This letter comprises the Benton Utilities Wastewater Conveyance system 2022 annual report, and affirm our efforts to satisfy the demands of the Consent Administrative Order issued in 2011. 2022 again like 2021 has come with many challenges with the continuation of Covid-19 and its effects on our department, contractor pricing that we use and part suppliers. I am grateful to report that even with the challenges we have had with staffing issues and the skyrocketing of prices we have had another very productive year in our efforts to reduce sanitary sewer overflows as well as infiltration and inflow issues. Overall, we have had a productive year in an increasingly rapid growing city with expanding infrastructure and capacity demands. With the help and support from our General Manager, Mr. David Vondran, P.E. and Benton Public Utility Commission we have been able to rehab many lift stations that have been a problem, replacing many pumps in our system, upgrading many lift stations, repair and stabilize creek crossings, we have also hit some of our bad areas with pipe bursting to reduce sewer stoppages and overflows. We have had numerous subdivisions, commercial buildings, retail complexes, and other significant development all come online. Consequently, this growth has challenged our resources, but we have accomplished the great task on completing the demands of the C.A.O. before the 2023 deadline. I am very proud of my departments hard work and diligence to complete and greatly approve Benton Utilities Sewer infrastructure.

In keeping with the objectives outlined in the Sewer System Evaluation Study (SSES), we continue to place special emphasis on the significant reduction of sanitary sewer overflows as well as inflow and infiltration issues throughout the system. We have pursued these objectives by (1) gravity line repairs and replacement, (2) manhole rehabilitation, repairs and replacement, (3) addition of equipment, (4) upgrades and rehabilitation of lift stations, (5) proactive and preventative maintenance, and (6) strategic planning.

Some highlights of the year have been significant in helping grow our sewer infrastructure while repairing problems that cause overflows in our system. We have done a total rehab on 10 lift stations and replaced over 21 lift stations pumps. One of the major stations was our Hurricane Lake Main Station with the replacement of old pumps and installation of 2 Flygt 3315 160 HP pumps, new control panel and added a Godwin HL225M Diesel Dr-Prime pump. We are continuing to make significant changes with SCADA system. We had added more Flygt Multismart pump station manager to let us use remote control (Page 2, 2022 SSES//CAO Report)

programming, pump reversal to remove blockages automatically, pump efficiency to ensure intelligent maintenance and capital improvements at our major lift stations. We are continuing to add notification system to a better monitoring system of HighTide at our smaller stations. We have installed 10 more High Tide units and 3 more Flygt Multismart units.

The following chart represents statistical data of the sewer system.

Benton Wastewater Conveyance Statistical Data-2022													
JOB DATA:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
Generators check	18	18	18	18	18	18	18	18	18	21	21	21	225
CAO GRAVITY REPAIR-PIPE BURST	0	0	0	0	1180'	670'	445'	263'	844'	0	953'	4,355'	8,710
Manhole SSES/CAO- work/inspect.	0	0	3	6	12	0	2	0	3	5	0	4	35
M.H -Lined/Patched/Repair/cleaned	3	3	5	9	8	1	1	12	1	3	8	3	57
NO. OF L/S FAILURES or work done	15	17	23	15	17	15	16	26	17	15	12	21	209
NO. OF LIFTSTATIONS OVERFLOW	0	0	2	0	0	2	0	0	0	0	0	0	4
NO. OF LIFT STATIONS CLEANED	15	24	23	24	26	2	12	41	21	26	23	26	266
Survey sewer mains/ manholes	3	18	8	13	51	2	2	12	4	9	10	7	139
No. Sewer Main overflow	0	0	0	0	0	0	0	0	0	0	0	2	2
NO. OF MANHOLES OVERFLOW	0	0	0	0	1	0	1	0	1	0	1	1	5
AIR RELIEF /Force main- Overflow	0	0	0	0	0	0	0	0	0	1	0	0	1
Call out not sewer-storm water issue	0	0	0	0	0	1	0	0	0	0	0	0	1
NO. Line blockage call (not ours)	2	2	6	5	8	4	4	4	3	7	3	4	52
NO. OF SEWER LINES BLOCKAGE	0	9	8	7	4	4	2	4	5	0	5	7	55
NO. OF FT OF SEWER LINE CLEANED	9,879'	2,136'	4,570'	10,271'	1,496'	12,018'	1588'	15,683'	2,145'	1,453'	8,149'	2,482'	62,870'
NO. OF FT PIPE BURSTED	0	0	0	0	0	0	0	328'	0	1,688'	0	2,016'	4,032'
POINT REPAIR DUE TO BORING CO. or Contractor	6	7	1	3	4	1	2	2	1	6	4	3	40
SEWER POINT REPAIRS	0	1	3	2	1,75'	1,4'	1,20'	2,10'	2,12'	3,53'	1,2'	2, 74'	19
Station/ Right of way/M.H-spray,cut	0	0	22	29	22	7	1	45	25	31	6	0	188
Right of Ways cleared cut	0	0	24	6	24	0	25	12	13	12	0	0	112
NO. Monthly Liftstations Inspected	218	216	371	280	281	119	195	194	133	220	260	280	2,767
NO. OF SEWER INSPECTIONS	33	43	36	45	67	55	62	32	42	43	41	24	523
NO. OF GREASE TRAPS INSPECTED	176	4	2	1	1	0	181	1	0	182	8	0	556
NO. OF FT OF SEWER LINE CAMERA	465.5'	2797'	227'	2511'	1,485'	3262'	3158.3'	5231'	1,939'	406'	365'	1,848'	23,694.80
ASST. OTHER DEPT.	0	1	0	1	1	3	0	2	3	1	1	2	15
LOCATES							523	588	462	504	406	293	2,776

Summarily, the spreadsheet documents problems within the system, but also significant efforts that were made in preventative and proactive maintenance to curtail these issues. We have had 5 manhole sanitary sewer overflows (SSO's) were recorded in 2022 from 9 sanitary sewer overflows (SSO's) recorded in 2021, 1 air relief and force main overflows in 2022 due to contractor error. At the same time, some 62,870' linear feet (11.9 miles) of sewer main cleaned with our jet-vac. Pipe bursting (12,742 linear feet) done in areas plagued with inflow and infiltration (I & I) problems, and 19 sewer point repairs. Moreover, there was 23,694.80' linear feet of sewer line video inspected to identify line deficiencies and issues. There was a total of 92 manholes in which repairs and rehabilitation work were performed. There were 4 lift stations that had SSO's in 2022 and 209 lift station failures, but there were also 266 lift station cleanings (jet-vac) done with a total of lift station inspections. In an effort to keep oil and grease out of the system and from entering the treatment plant, 556 inspections were performed on grease traps in 2022 from 532 in 2021. We also are implementing strict guidelines and specifications for Mobile Food Trucks. (Page 3, 2022 SSES/CAO Report)

A key component of line system improvement is pipe bursting. We have completed (12,742 linear feet) of pipe bursting done in 2022. For example, it became necessary to pipe burst and up size our sewer main where the line was offset, and I & I was rampant and continued to cause overflows in heavy rain events in the vicinity of Edgemoor Tr to Brent Ford Rd. This was a major project that half was completed last year and the other half was completed next year. The scope of work is replacing a major trunk line from 10" and 12" to 15" and three creek crossings. Even though we have completed our Pipe Burst on our C.A.O we have plans to continue to upsize, upgrade, and replace old sewer lines throughout our infrastructure. .

We have taken into our system on new residential development over 9,232 feet of new 8" sewer main. Total of 4,677 feet of force main, and four lift stations into our infrastructure in 2022.

Out of the total 25,807 linear feet of pipe bursting required under the original C.A.O. report and while inspecting our sewer infrastructure we have added 11,111 linear feet to our report for a total of 36,918 feet. Over 40,000 feet has been completed. We will continue to upgrade and repair our sewer infrastructure past 2022.

During the pipe burst and repair projects, we found many sections of gravity sewer mains that have been taking in creeks during heavy rain events. We have also performed point repairs on 3 ductile creek crossings this year and stabilized the bank and wash out on all 6 crossings, many lines on the creeks created major I&I into our system.

We have performed many point repairs this year that have been creating sewer stoppages and some had been creating manhole overflows. We have reduced the number of overflows from 2021 and will be working on reducing 2022's number in 2023.

In conclusion, 2022 was a challenging year trying to juggle the continuing aging of sewer infrastructure with the road blocks Covid-19 and staff shortages has brought again. But I believe we still had a very productive year and completing all the section in the CAO and meeting the demands of the Consent Administrative Order. The integrity of the system infrastructure was ensured and expanded. Inflow and infiltration have been noticeably reduced. We will continue to place emphasis again this year on the priority basins identified in the Sanitary Sewer Evaluation Study. It is both our goal and our duty to improve Benton's sanitary sewer collection system for public health, for diligent stewardship of the environment, and for the demands of the vibrant growth of this city.

Please feel free to contact me at 501-776-5955, or you may email me at [nschultz@bentonutilities.com](mailto:nschultz@bentonutilities.com) with any questions or comments you may have.

Sincerely,

Nathan Schultz,  
Benton Utilities Wastewater Conveyance Manager



Cc: David Vondran, P.E., and General Manager of Benton Utilities  
Jerry Ponder, Chairman of the Benton Utilities Public Utilities Commission.  
Benton Utility Commission Members: Gary Ferrell, Brad Johnson, Skylyr Stott  
Byron Hicks, P.E. and C.E.O. of McClelland Consulting Engineers, Inc