

Sewer System Management Plan Annual Audit Report

Name of Agency	Arrowbear Park County Water District	
Date of Audit	02/13/2025	
Name of Auditor(s)	Christopher Dumas	
System Overview		
Miles of Gravity Sewer Mains		12.7
Miles of Force Mains		.44
Total Miles of all Sewer Lines		13.14
Number of Pump Stations		1
Number of Private Sewer Mains, Excluding Laterals		0
Population Served		1396
Current Average Monthly Single-Family Residential Sewer Rate		\$47.27

I. GOALS

1. Are the goals stated in the SSMP still appropriate and accurate? **YES** / NO
2. If you answered NO to question 1, describe the content and schedule for updates.

Notes/Comments:

II. ORGANIZATION

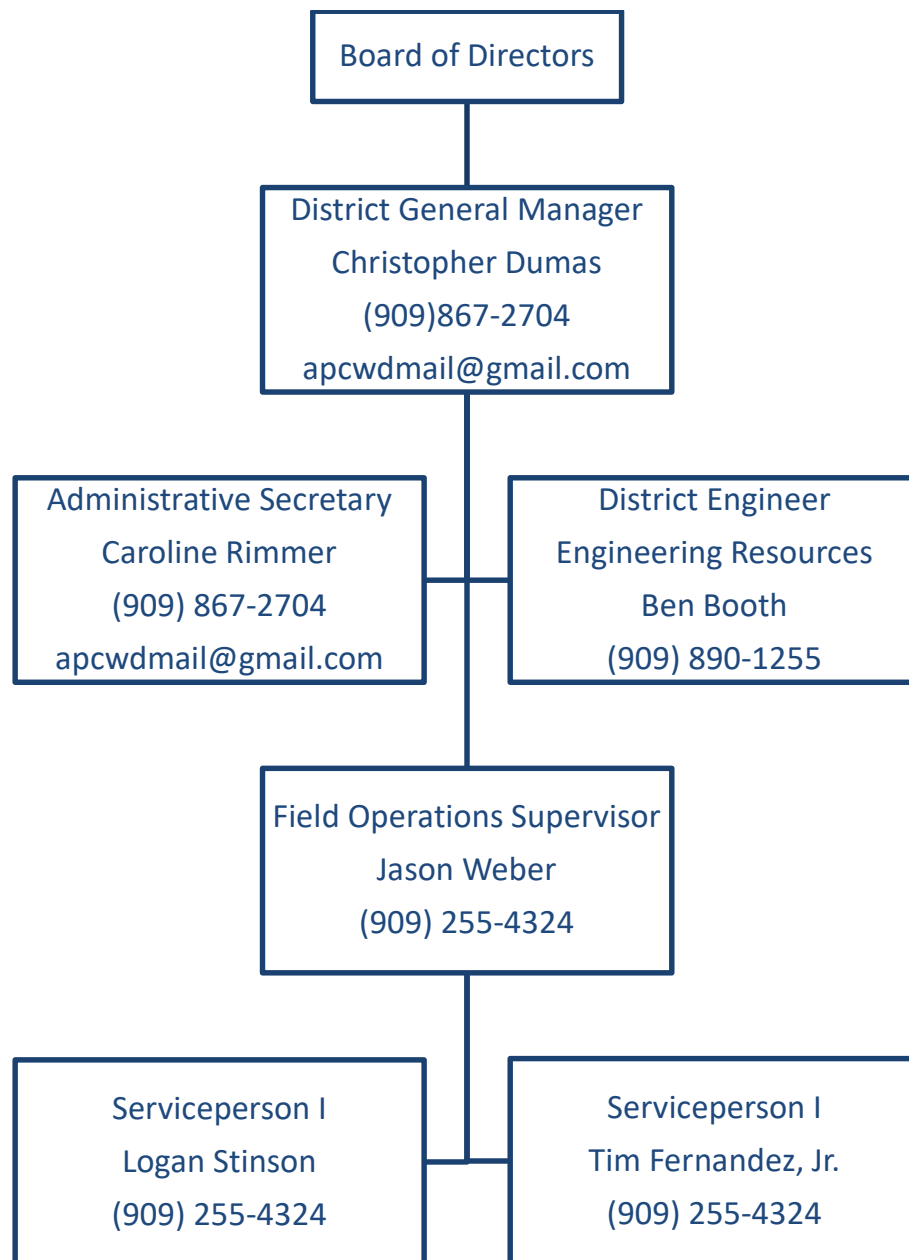
Reference Material

- Organization Chart
- Phone List

1. Is the SSMP up-to-date with agency organization and staffing contact information? **YES** / NO
2. If you answered NO to question 1, describe content and schedule for updates.

Notes/Comments:

- 10/16/2024, Updated org chart and phone list with current personnel.



III. LEGAL AUTHORITY

Reference Material

- Ordinances
- Enforcement Actions

1. Does the SSMP contain up-to-date information about your agency's legal authority? **YES** / NO
2. Does your agency have sufficient legal authority to control sewer use and maintenance? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for changes.

Notes/Comments:

IV. OPERATION AND MAINTENANCE

A. Collection System Maps

Reference Material

- Sanitary Sewer System Maps

1. Does the SSMP contain up-to-date information about your agency's maps?
YES / NO
2. Are your agency's collection system maps complete, up-to-date, and sufficiently detailed?
YES / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for changes.

Notes/Comments:

B. Resources and Budget

Reference Material

- Current Capital Improvement Plan (CIP)
- Current Operating Budget

1. Does the SSMP contain up-to-date information about your agency's resources and budget?
YES / NO
2. Are your agency's resources and budget sufficient to support effective sewer system management?
YES / NO
3. Do your agency's planning efforts support long-term goals? **YES** / NO
4. If you answered NO to questions 1, 2 or 3, describe content and schedule for necessary changes.

Notes/Comments:

C. Preventative Maintenance

Reference Material

- Cleaning Schedule
- List or Map of Hot Spots
- Work Orders
- Service Call Data
- Customer Feedback

1. Does the SSMP contain up-to-date information about your agency's preventative maintenance program?
YES / NO
2. Are you agency's preventative maintenance activities sufficient and effective in reducing and preventing SSOs and blockages?
YES / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

D. REHABILITATION AND REPLACEMENT PLAN

1. Does the SSMP contain up-to-date information about your agency's rehabilitation and replacement plan?
YES / NO
2. Is your agency's rehabilitation and replacement plan effective in locating, identifying, and addressing deficiencies?
YES / NO

3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

E. EQUIPMENT AND REPLACEMENT PARTS INVENTORIES

1. Does the SSMP contain up-to-date information about equipment and replacement parts inventories? **YES** / NO
2. Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

F. TRAINING

1. Does the SSMP contain up-to-date information about your agency's training expectations and programs? **YES** / NO
2. Do supervisors believe that their staff is sufficiently trained? **YES** / NO
3. Are staff satisfied with the training opportunities and support offered to them? **YES** / NO
4. If you answered NO to questions 1, 2 or 3, describe content and schedule for necessary changes.

Notes/Comments:

V. DESIGN AND PERFORMANCE PROVISIONS

Reference Material

- Design and Construction Standards
- Ordinances

1. Does the SSMP contain up-to-date information about your agency's design and construction standards? **YES** / NO
2. Are design and construction standards, as well as standards for inspection and testing of new and rehabilitated facilities sufficiently comprehensive and up-to-date? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

VI. OVERFLOW EMERGENCY RESPONSE PLAN

Reference Material

- Data Submitted to CIWQS
- Service Call Data

1. Does the SSMP contain an up-to-date version of your agency's Overflow Emergency Response Plan? **YES** / NO
2. Considering the information in Table 1, is the Overflow Emergency Response Plan effective in handling SSOs? **YES**/NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

Table 1. Annual SSO Statistics

Indicator	YR <u>2021</u>	YR <u>2022</u>	YR <u>2023</u>	YR <u>2024</u>
Number of SSOs (total)				
Wet season SSOs*	0	0	0	0
Dry season SSOs*	1	0	0	0
Number of SSOs (by volume range)				
< 10 gal	0	0	0	0
10 – 99 gal	1	0	0	0
100 – 999 gal	0	0	0	0
1000 – 9,999 gal	0	0	0	0
≥ 10,000 gal	0	0	0	0
Total SSO volume				
Volume reaching waters of the State	0	N/A	N/A	N/A
Volume not contained but not reaching waters of the State	0	N/A	N/A	N/A
Volume recovered	0	N/A	N/A	N/A
Net volume (total minus recovered)	0	N/A	N/A	N/A
Number of SSOs per 100 miles of sewer per Year	1	N/A	N/A	N/A
Volume of SSOs per 100 miles of sewer per Year	25	N/A	N/A	N/A
Total volume conveyed to treatment facilities (million gallons)	22.45	20.94	23.64	21.14
Total volume SSO / total volume conveyed, gallons / million gallons	< .00001	N/A	N/A	N/A
Number of SSOs (by cause)				
Blockages	0	0	0	0
Roots	0	0	0	0
Grease	0	0	0	0
Debris	0	0	0	0
Debris from laterals	0	0	0	0
Animal carcass	0	0	0	0
Construction debris	0	0	0	0
Multiple causes	0	0	0	0
Infrastructure failure	0	0	0	0
Inflow & Infiltration	0	0	0	0
Natural disaster	0	0	0	0
Flow capacity deficiency	0	0	0	0
Bypass	0	0	0	0
Cause unknown	1	0	0	0
Average emergency response time (minutes)	4	N/A	N/A	N/A
Business hours	1	N/A	N/A	N/A
Non-business hours	0	N/A	N/A	N/A
Number of locations with multiple SSOs	0	0	0	0

*Wet season is defined as November-April, dry season May-October. Seasonal categorization does not necessarily reflect weather conditions at time of SSO.

VII. FOG CONTROL PROGRAM

Reference Material

- List or Map of FOG Sources in Service Area
- List or Map of Hotspots
- Data Submitted to CIWQS
- Service Call Data

Table 2. FOG Control Statistics

	YR 2021	YR 2022	YR 2023	YR 2024
Number of SSOs caused by FOG	0	0	0	0
Planned cleaning (LF)	14,200	14,800	11,167	3,568
Unplanned cleaning (LF)	1,280	1,240	1,200	1,810
Ratio of planned to unplanned cleaning	9.0%	8.4%	10.7%	50.7%
Number of FOG inspections completed	92	92	92	10

1. Does the SSMP contain up-to-date information about your agency's FOG control program? **YES** / NO
2. Considering the information in Table 2, is the current FOG program effective in documenting and controlling FOG sources? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

VIII. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLANS

Reference Material

- CIP
- SSO Data

Table 3. Capacity Assurance Statistics

	YR 2021	YR 2022	YR 2023	YR 2024
Number of SSOs caused by capacity limitations	0	0	0	0

1. Does the SSMP contain up-to-date information about your agency's capacity assessment? **YES** / NO
2. Has your agency completed a capacity assessment and identified and addressed any hydraulic deficiencies in the system? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

IX. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

1. Does the SSMP contain up-to-date information about your agency's data collection and organization? **YES** / NO

2. Is your agency's data collection and organization sufficient to evaluate the effectiveness of your SSMP? **YES** / NO
3. If you answered NO to questions 1 or 2, describe content and schedule for necessary changes.

Notes/Comments:

X. SSMP PROGRAM AUDITS

Will this SSMP audit be submitted with the annual report to the Regional Water Board by March 15? **YES** / NO

XI. COMMUNICATION PROGRAM

Reference Material

- Website
 - Other communication such as mailings, newspaper ads, or other outreach
 - Customer Feedback
1. Does the SSMP contain up-to-date information about your agency's public outreach activities? **YES** / NO
 2. Does the SSMP contain up-to-date information about your agency's communications with satellite and tributary agencies? **YES** / NO
 3. Has your agency effectively communicated with the public and other agencies about the SSMP, and addressed feedback? **YES** / NO
 4. If you answered NO to questions 1, 2 or 3, describe content and schedule for necessary changes.

Notes/Comments:

XII. MANAGEMENT NARRATIVE

2020 - Upon review of this audit, it is the management's opinion that due to lift station control replacement completed in Jan. 2020, vigilant regular inspections, and ongoing annual cleaning and video inspection of a significant amount of the collections system the result was a year without any SSO's. In addition, completion of the District's manhole locating and raising project in 2020, prior to the paving of the community's streets, will provide an enhanced ability to clean, inspect, and quickly access the collections system in the event of a blockage.

2021 - Upon review of this audit, it is the management's opinion that the lift station control replacement done in Jan. 2020, continuing regular inspections, and ongoing annual cleaning and video inspection of a significant amount of the collections system resulted in a year with only one minor SSO. That SSO was contained through quick response and the partial blockage contributed to only about 25 gallons of wastewater spilling and being absorbed into the ground. The entire upstream section of sewer main was thoroughly cleaned, resulting in no further blockages or spills. Operators will continue to monitor this section of the collection system.

2022 - Upon review of this audit, it is the management's opinion that the lift station control replacement done in Jan. 2020, continuing regular inspections, and ongoing

annual cleaning and video inspection of a significant amount of the collections system resulted in a year with no SSO's.

2023 - Upon review of this audit, it is the management's opinion that the lift station control replacement done in Jan. 2020, continuing regular inspections, and ongoing annual cleaning and video inspection of a significant amount of the collections system resulted in a year with no SSO's. Going forward, acquisition of District owned cleaning (new jetter) and inspection (video system) equipment will allow the District to perform their own annual cleaning and inspection as well as real-time cleaning and inspection (especially during wet season periods) to identify potential I & I issues. As of late 2023 and early 2024, The District has already begun inspecting the sanitary sewer system and is in possession of video inspection equipment and a new jetter trailer for cleaning equipment.

2024 Audit Review:

Upon review of this audit, it is the management's opinion that the lift station SCADA operating system installed in January 2020, the continuing regular inspections of manholes, two District siphons, lift station wet well and the operation of two submersible pumps, ongoing annual cleaning of known FOG and flat mains, and video inspection of the collection system resulted in a year with no SSOs. The district's purchase of a CCTV system (the cube) has increased our ability to access knowledge in need-to-know situations. Also, we will be able to inspect our system more frequently and as needed, compared to the past. The district did not clean and inspect as many of our sewer mains as in previous years. However, the district focused on the well-known FOG and flat areas, to ensure a properly flowing system. The district also excavated and repaired a few known sewer lateral (saddle) connections at the sewer main to remove roots and, after reassembly of the saddle connection, coated all connection points with a silicone sealer to prevent infiltration and deter roots from entering.