



Water Authority CMOM Plan

Albuquerque Bernalillo County
Water Utility Authority
Board Meeting

October 18, 2023

Mark S. Holstad, PE
Chief Engineer
Collection Section Manager

Agenda

- What is a CMOM Plan?
- Why does the Authority have a CMOM Plan?
- What are the components of the Authority CMOM Plan?
- How is the CMOM Program doing so far?
- What about the future?



Get on your horse and hold onto your hat
Cause we are going through a lot in 10 minutes

What is a CMOM Plan?

- Acronym
- Capacity, Management, Operation & Maintenance
- Intended to reduce Sanitary Sewer Overflows (SSOs)
- Many concepts developed in '90s but never became a law



Why does the Authority have a CMOM Plan?

- Required by Water Authority's 12/1/2019 NPDES Permit
- (First required by 10/1/2012 NPDES Permit)



REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

NPDES Permit No NM0022250

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Albuquerque Bernalillo County Water Utility Authority (ABCWUA) WWTP
PO Box 568
Albuquerque, NM 87103

is authorized to discharge from a facility located at 4201 2nd Street SW, Bernalillo County, New Mexico. The discharge will be to receiving water named Rio Grande River (Segment 20.6.4.105 of the Middle Rio Grande River Basin), from a point located approximately:

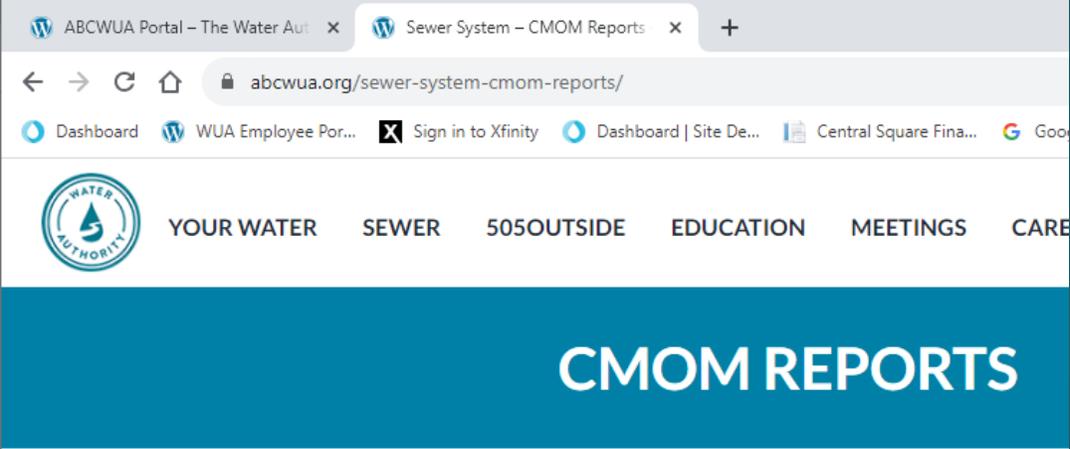
E. CAPACITY, MANAGEMENT OPERATIONS AND MAINTENANCE (CMOM)

The permittee shall continue to implement and update (if necessary) the Capacity, Management, Operation and Maintenance (CMOM) plan.

What are the components of the Authority CMOM Plan?

- FOG Policy
- CMOM Annual Report
- CMOM Program Self-Assessment



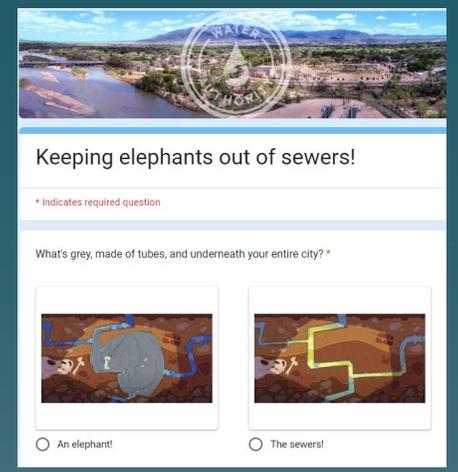
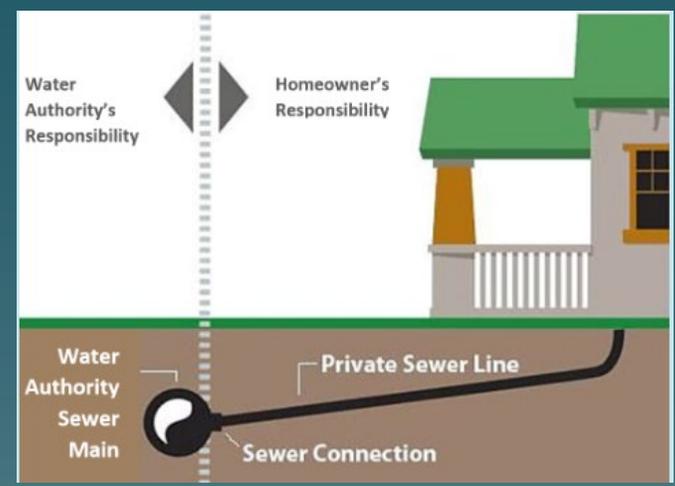


Where is the Authority CMOM Plan?

CMOM REPORTS

- Overview
- Collection
 - CMOM Reports
 - Collection System
 - Overflow
 - Emergency Response Plan (OERP)
 - Interactive Sewer Game
 - Lucky The Bird
 - History
- Pretreatment
- Reclamation
- Compost
- Report Sewer Odor
- Cockroach Control
- Sewer Line Responsibility
- Sewer Backwater Valve
- FAQs

- CMOM Plan and Annual Report CY2021
- CMOM Plan and Annual Report CY2020
- CMOM Plan and Annual Report CY2019
- CMOM Plan and Annual Report CY2018
- CMOM Program Self-Assessment CY2018
- CMOM Plan and Annual Report CY2017
- CMOM Plan and Annual Report FY2017
- CMOM Plan and Annual Report FY2016
- CMOM Plan and Annual Report FY2015
- CMOM Plan and Annual Report FY2014
- CMOM Plan and Annual Report FY2013



FOG Policy

- FOG = **Fats, Oils & Grease**
- FOG Policy is separate document
- Required by NPDES Permit. Approved by EPA.
- Works in conjunction with **Sewer Use and Wastewater Control Ordinance (SUO)** and **Enforcement Response Plan (ERP)** to reduce SSO rate and FOG loading on SWRP.
- Sets goals for inspecting **Food Service Establishments (FSEs)**
- Describes enforcement



CMOM Annual Report

- The CMOM Annual Report provides summary descriptions of CMOM activities (past and planned) and is intended to be a communication tool.
- The report is intended for Water Authority staff, regulatory authorities, customers, and the general public.
- <https://www.abcwua.org/sewer-system-cmom-reports/>



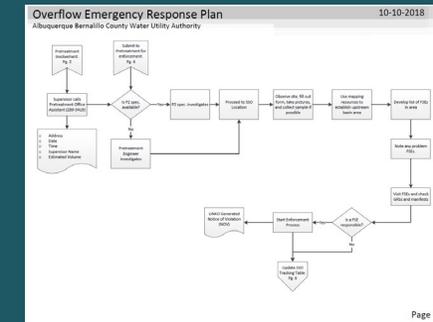
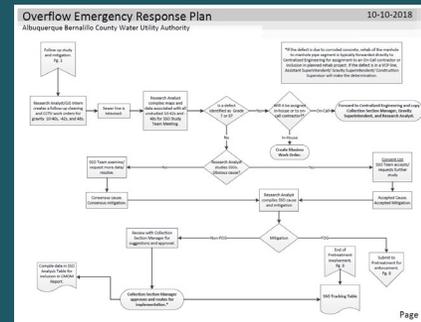
CMOM Annual
Report 2022



CMOM Annual Report

• SSO Study Team

- Collection Section – Research Analyst (team lead), Gravity Superintendent, Assistant Superintendent and Closed Circuit Television (CCTV) Supervisor;
- NPDES Pretreatment – Industrial Pretreatment Engineer and Pollution Prevention Specialist.
- The Mission Statement for the Study Team is: *The SSO Study Team will work inter-divisionally to study, analyze and determine causes of previous SSOs to mitigate future SSOs in the Collection System.*



Type	10-42	10-48	10-42 & 10-48	Metric W/D #	Detector	Request within 1 year	Date of SSO	Time of SSO	Duration (hr:min)	Location	Estimated Volume (gallons)	Reported Cause of Overflow	Observed Environmental Impact	Action Taken	Ultimate Discharge Location	Volume Recovered (gallons)	SSO Team Study	Enforcement
X				12368610	B	N	7/15/2017	1:12 PM	2:03	10920 BARBARA ELLEN AVE NE	615	GR	NEAH	CC/CW/W/WD/RR/RS/HTH	PST	615	CU	NF
X				12379586	B	N	7/31/2017	8:58 PM	:34	Glendale Ave. NE & Wyoming Blvd NE	230	GR	NEAH	CC/W/D/RR/RS/HTH	DST	200	SL/GR	SI/SP
X				12393058	B	N	8/18/2017	9:21 AM	2:19	11004 ELVIN AVE NE	100	GR/RGS	NEAH	CC/RS/HTH/WD	PST	50	RT	SI/SP
X				12397201	B	Y	8/25/2017	8:00 PM	NA	4523 11TH ST NW	NA	BP	NA	NA	BP	NA	BP	SP
X				12412756	B	Y	9/4/2017	12:00 PM	1:25	4600 PONDEROSA AVE NE	425	LF	NEAH	CC/W/D/RR/RS/HTH	PST	400	LF	BH
X				20866	B	N	10/4/2017	9:10 AM	1:50	5600 CENTRAL AVE SE	1,650	CO	NEAH	CC/CW/W/WD/RS/HTH	SD	1,500	CO	PT
X				29042	B	N	10/4/2017	6:05 PM	:17	9350 EAGLE RANCH RD NW	85	RT	NEAH	CC/W/D/RR/RS/HTH	PST	75	CU	CU
X				44852	B	Y	10/30/2017	8:31 AM	NA	106TH ST. & Eucaris Ave. SW	1,350	CO	NEAH	CC/CW/W/RR	PST	1,000	SC	PT
X				51128	B	N	11/8/2017	8:10 AM	:40	Copper Ave. & Jefferson St. NE	1,000	RK	NEAH	CC/CW/W/RR/HTH	PST	800	DB	NP
X				51587	B	Y	11/9/2017	5:50 PM	:55	5740 PIEDRA RD NW	275	RGS	NEAH	CC/W/D/RR/RS/HTH	PST	250	RT	SP
X				52441	B	Y	11/13/2017	1:00 PM	2:15	3624 CENTRAL AVE SE	2,025	CO/RK	NEAH	RS	PST	1,750	CO/DB	PT
X				53760	I2	N	11/13/2017	10:30 AM	:05	7421 MENAUL BLVD NE	350	CO	NEAH	CW/W/WD/RR/HTH/ENC	PST	200	CO	PT
X				53910	I2	N	11/8/2017	2:30 PM	:01	2608 Tennessee NE	30	CO	NEAH	RR/CW/W/WD/RR/HTH	PST	30	CO	PT
X				54006	I2	N	11/14/2017	12:25 PM	:05	2613 SAN PABLO ST NE	20	CO	NEAH	CW/W/RR/RR/HTH	PST	10	CO/EO	PT
X				65025	I2	N	11/26/2017	11:50 AM	1:52	200 EUBANK BLVD SE	1,120	DB/GR/RGS	NEAH	CC/CW/W/RR/WD/HTH	PST	300	CU	NF
X				65035	B	N	11/26/2017	10:30 AM	2:30	12030 MENAUL BLVD NE	250	RGR	NEAH	HTH	DST	10	RT	SI/SP
X				65157	B	N	11/27/2017	11:00 AM	NA	11913 MENAUL BLVD NE	NA	RGR/RGS	NA	CC	PP	NA	RT	SI/SP
X				64642	I0	N	11/28/2017	8:00 PM	NA	1501 LAS LOMAS AVE NE	NA	GR/DB	NA	CC	PP	NA	CO	BH
X				64914	B	N	11/29/2017	10:45 AM	:50	629 MONROE ST SE	250	GR/RGS	NEAH	CC/CW/W/RR/WD/HTH	PST	200	SL	SI
X				70455	I2	Y	12/5/2017	7:40 AM	:35	2612 DALLAS ST NE	1,800	CO	NEAH	RR/RR/WD/ENC/HTH	PST	-	CO	PT
X				75265	B	N	12/12/2017	12:52 AM	2:03	4720 SAN MATEO BLVD NE	615	GR/RGS	NEAH	RR/RR/WD/HTH	PST	615	GR	PT
X				75136	B	Y	12/8/2017	10:00 AM	NA	4523 11TH ST NW	NA	BP	NA	NA	BP	NA	BP	SP
X				75381	I5	N	12/2/2017	11:02 AM	5:43	2429 QUINCY ST NE	15,000	LF	NEAH	CW/W/RR/RR/HTH	AC	14,500	LF	BH
X				79633	I5	N	12/20/2017	1:35 PM	:01	2429 QUINCY ST NE	50	CO	NEAH	CW/W/RR/RR/WD/ENC/HTH	PST	45	CO	PT

Table 3 Summary of Causes from SSO Study

10-42, 10-48 Causes	Total	% of Total
Burp	2	8%
Construction	6	25%
Construction/Debris	1	4%
Construction/Equipment	1	4%
Cause Unknown	3	13%
Debris	1	4%
Grease	1	4%
Line Failure	2	8%
Roots	4	17%
Surcharged	1	4%
Sag in Line	1	4%
Sag in Line/Grease	1	4%
Grand Total	24	100%

Table 4 Summary Mitigations from SSO Study

10-42, 10-48 Mitigations	Total	% of Total
No Follow Up Needed	4	17%
Pretreatment Notified	9	38%
Rehab/Replace	3	13%
Short Interval	1	4%
Short Interval/Special Instructions	4	17%
Special Instructions	3	13%
Grand Total	24	100%



CMOM Annual Report

- **Actions Implemented and On-Going Programs**
 - FOG Policy Implementation
 - Overflow Emergency Response Plan (OERP)
 - Force Main Inspection Program
 - Closed Circuit Television (CCTV)
 - Cleaning Program Goal
 - Pilot Manhole Monitoring Program
- **Identified Gaps in the Water Authority Processes with Recommendation to Close**
 - Prohibited Discharges, i.e., SSOs
 - GIS Gap



CMOM Program Self-Assessment

EPA states: “An important component of a successful CMOM program is to periodically collect information on current systems and activities and develop a “snapshot-in-time” analysis.”

The next update will coincide with the CY2023 CMOM Report.

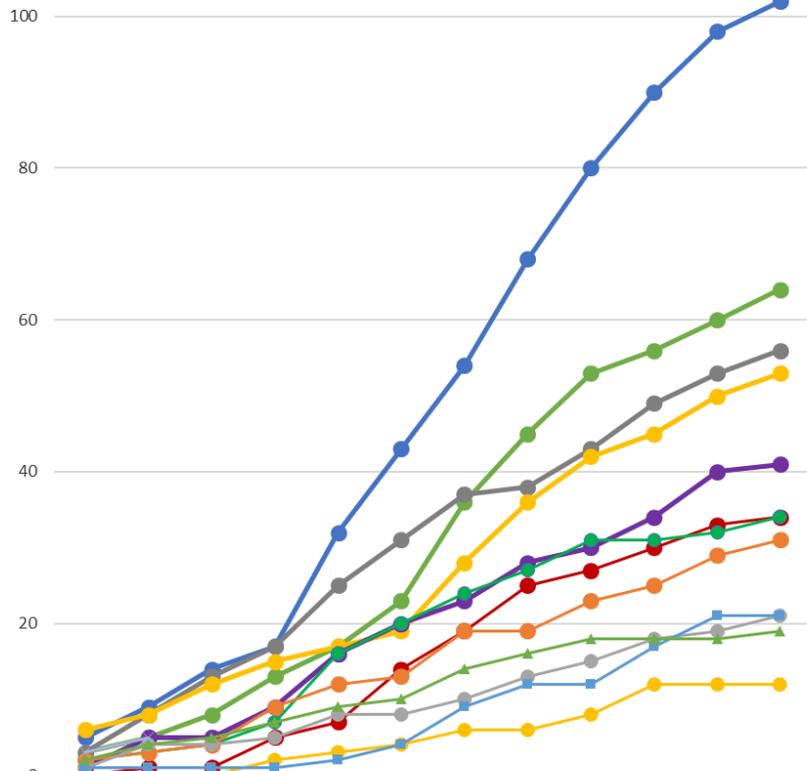
Conveyance & Pumping

	Pump Stations			Vacuum Stations		
	Gravity Sewers	Stations	Force Mains	Stations	Vacuum Lines	Force Mains
Pipes and pumps: Length/quantity	2,209 ⁺	34	36.5 ⁺	10	154 ⁺	14.5 ⁺
	MILES	NUMBER	MILES	NUMBER	MILES	MILES
Age of system: 0-25 years old	42.4%	24 [#]	80.8%	10	100%	100.0%
	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT
26-50 years old	38.0%	9 [#]	18.8%	N/A	0	0
	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT
51-75 years old	18.9%	13 [#]	0.4%	N/A	0	0
	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT
>75 years old	0.7%	N/A	N/A	N/A	0	0
	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT

Satellite Communities and Sewer Use Ordinance (SUO)

Checklist Item	Yes	No	N/A
SUO-01 Does the utility receive flow from satellite communities? IF NO, GO TO NEXT SECTION Comments:	X		
SUO-02 What is the total area from satellite communities that contribute flow to the collection system? (Acres or square miles) Comments: Sandia Heights = 1,912 acres; KAFB = 50,352 acres; Tierra West = 102 acres; Village of Tijeras = 20 acres Total acreage = 52,386			
SUO-03 Does the utility require satellite communities to enter into an agreement? IF NO, GO TO QUESTION SUO-06 Comments: Pursuant to the utility’s System Expansion Ordinance, all developments or communities are required to enter into a development agreement for service.	X		
SUO-04 Does the agreement include the requirements listed in the sewer use ordinance? Comments: Agreements state that the user is subject to the ordinances, policies and regulations of the Water Authority and payment of the rates and charges imposed by the Water Authority for wholesale wastewater service. Therefore, all requirements are in current ordinances.	X		

10-42 SSOs Cumulative in the Collection System



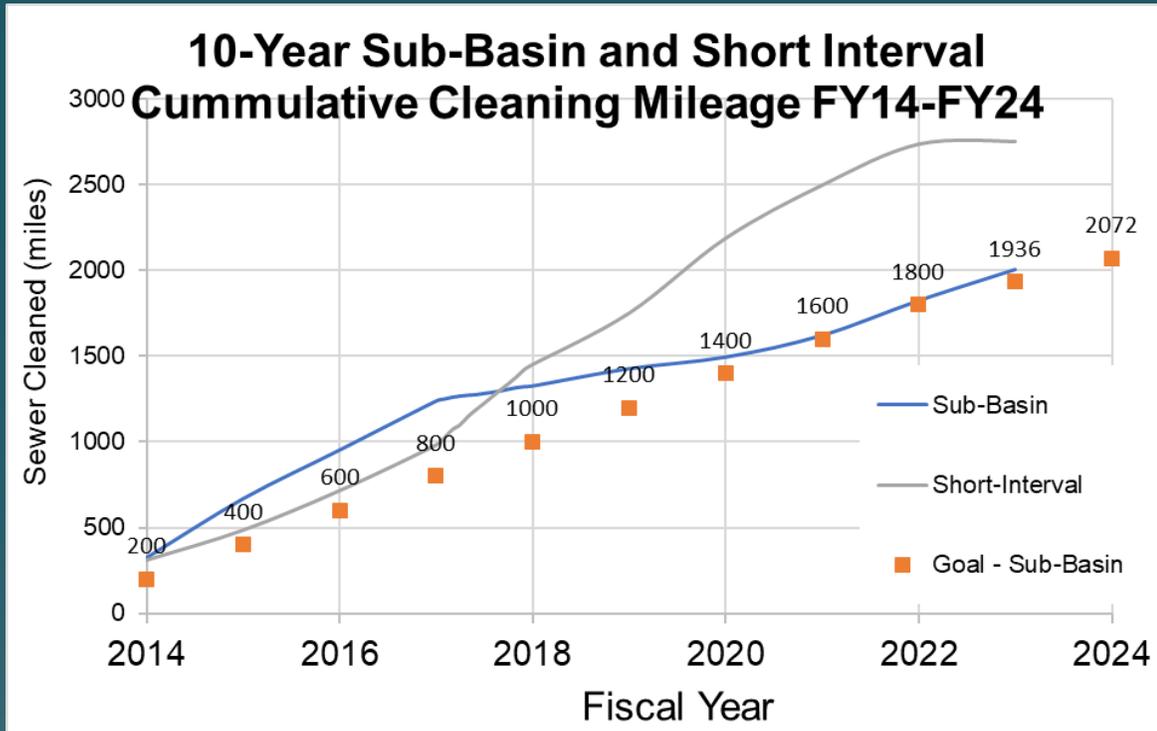
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 12	5	9	14	17	32	43	54	68	80	90	98	102
FY 13	3	5	8	13	17	23	36	45	53	56	60	64
FY 14	3	8	13	17	25	31	37	38	43	49	53	56
FY 15	6	8	12	15	17	19	28	36	42	45	50	53
FY 16	1	5	5	9	16	20	23	28	30	34	40	41
FY 17	0	1	1	5	7	14	19	25	27	30	33	34
FY 18	2	3	4	7	16	20	24	27	31	31	32	34
FY 19	2	3	4	9	12	13	19	19	23	25	29	31
FY 20	1	4	4	5	8	8	10	13	15	18	19	21
FY 21	0	0	0	2	3	4	6	6	8	12	12	12
FY 22	1	1	1	1	2	4	9	12	12	17	21	21
FY 23	2	4	5	7	9	10	14	16	18	18	18	19
FY 24	3	5										

How is the CMOM Program doing so far?

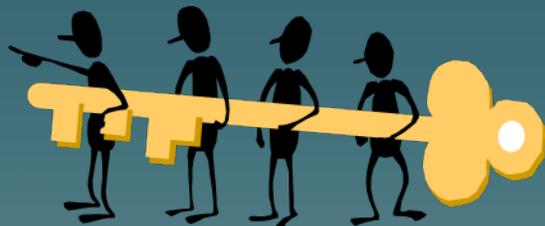
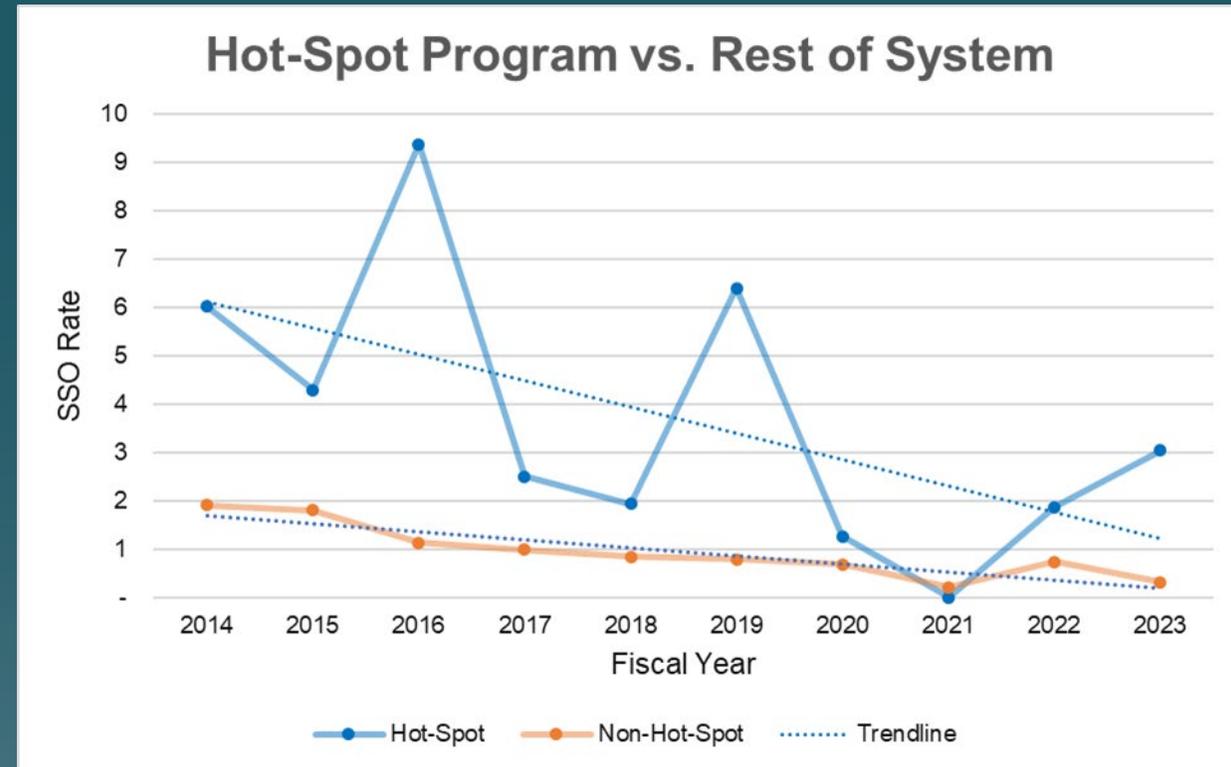


What about the future?

Effective Cleaning

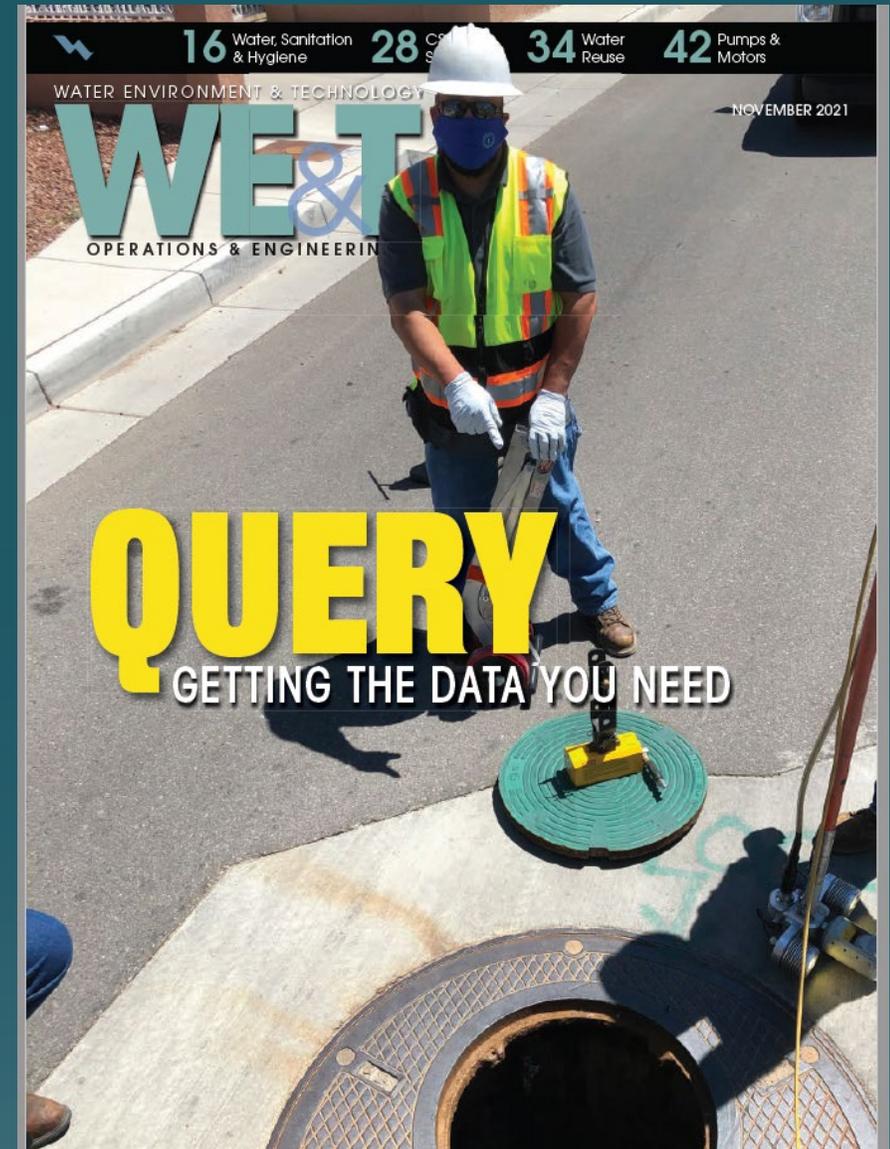
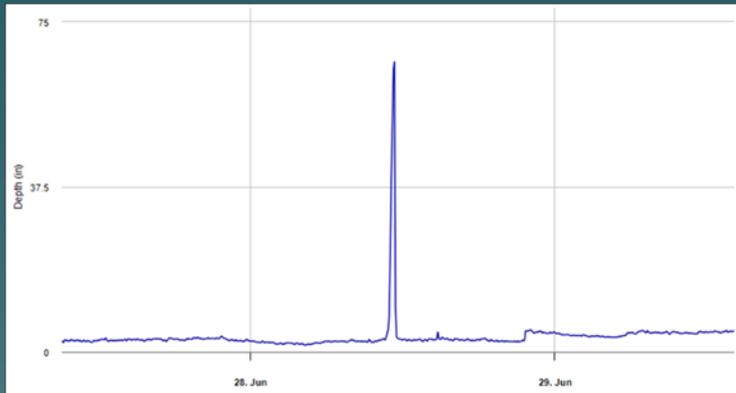


The screenshot shows the weftec website interface. At the top left is the weftec logo with the tagline 'the water quality event™'. To the right is a 'register for your weftec experience' button. Below the logo are navigation tabs: ABOUT, ATTEND, EXHIBIT, SPEAK, SPONSOR/ADVERTISE, and a search bar. The main content area features the title 'Collection System Cleaning: Building Consensus on a New Paradigm'.



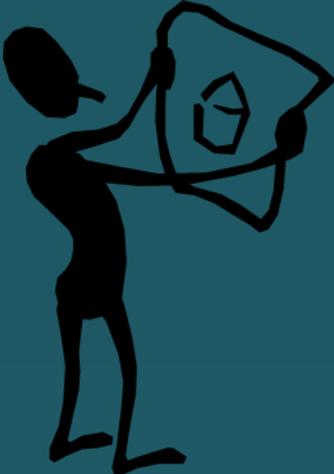
What about the future?

Data Capture & Utilization



What about the future?

Capture Spill & Remove



Coordination with AMAFCA

Questions

