

**OSAGE BEACH / LAKE OZARK
JOINT SEWER BOARD MEETING
AGENDA
November 15th, 2022 @ 4:00 p.m.
LAKE OZARK CITY HALL**

1. CALL TO ORDER

2. ROLL CALL

Mayor, Lake Ozark, Dennis Newberry
Mayor, Osage Beach, Michael Harmison
City Administrator, Osage Beach, Jeana Woods
City Administrator, Lake Ozark, David Mitchem
Alderman, Osage Beach, Kevin Rucker
Alderman, Lake Ozark, Pat Thompson
Public Works Director, Lake Ozark, Matt Michalik
Public Works Operations Manager, Osage Beach, Kevin Crooks
Member at Large, Mr. Gary Hamner

3. MINUTES

Page Numbers

Regular Meeting: October 18th, 2022

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4. REPORTS –

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 Alliance 2022 Regulatory Compliance Report	
 Approval of Flow Chart; October 2022	

5. OLD BUSINESS

- A. Board Representative Update
- B. Review and discussion 2023 Budget draft

6. NEW BUSINESS

- A. Discussion and possible approval of raising the haulers fee from \$.04 /gallon to \$.05 /gallon Jan 1, 2023.

7. ADDITIONAL DISCUSSION ITEMS

8. ADJOURNMENT

THE NEXT MEETING WILL BE December 20th, 2022 4:00 PM @ LAKE OZARK CITY HALL

**LAKE OZARK-OSAGE BEACH
JOINT SEWER BOARD**
Meeting Minutes – October 18th, 2022

CALL TO ORDER:

Mayor Dennis Newberry called the meeting to order at 4:00 pm on Tuesday October 18th, 2022 at Lake Ozark City Hall.

ROLL CALL:

Mayor, Lake Ozark, Dennis Newberry – Present
Mayor, Osage Beach, Michael Harmison- Present
City Administrator Osage Beach, Jeana Woods - Present
City Administrator Osage Beach, Jeana Woods – Present
Alderman Osage Beach, Kevin Rucker- Present
Alderman Lake Ozark, Pat Thompson- Present
Public Works Director Lake Ozark, Matt Michalik – Absent
Public Works Operations Manager, Kevin Crooks – Present
Resident Member, Mr. Gary Hamner - Absent

MINUTES:

Mayor, Osage Beach, Michael Harmison motioned to approve the meeting minutes from September 20th, 2022. The motion was seconded Alderman Lake Ozark, Pat Thompson and passed unanimously.

REPORTS:

- Bill List – Motion to approve by City Administrator Lake Ozark, David Mitchem. The motions was seconded by Alderman Lake Ozark, Pat Thompson. and was passed unanimously.
- Revenue Budget Analysis.
- Expenditure Budget Analysis.
- Income & Expense Summary, Check Registers and Bank Statements were reviewed.

Alderman Lake Ozark, Pat Thompson motioned to approved the Bill List, Revenue Budget Analysis, Expenditure Budget Analysis and the Income & Expense Summary, Check Registers and Bank Statements. The motion was seconded by Mayor, Osage Beach, Michael Harmison and was unanimously approved.

ALLIANCE REPORT OF OPERATIONS:

Alliance Report of Operations: The average daily incoming flow for September was 1.358 mgd. We had 2.4 inches of precipitation in September measured at the WWTP.

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD and TSS of 1.5 mg/l and 1.4 mg/l respectively for September which represents a 99.2 + % or better removal.

The MLSS average for both aeration basins was 4,915 mg/l in September. There were 51 loads of biosolids or 183,600 gallons land applied in September. We received 76 loads of septage or 168,000 gallons for September.

Other – pending getting numbers back from the vendors for the 5-Year CIP. Targeting getting numbers back by the November 2022 meeting.

Discussion to add the recommendation to raise the dump fee to .05 cents per gallon to the November Meeting.

APPROVAL OF FLOW CHART

Mayor, Osage Beach, Michael Harmison motioned to approve the flow chart. The motion was seconded by City Administrator Osage Beach, Jeana Woods and it was unanimously approved.

OLD BUSINESS:

A. Board Representative Update. No update

B. NEW BUSINESS:

- Reviewed and discussed the 2023 budget draft.
 - A. Motion made to remove Aeration Basin, grit removal from the 2023 budget. Will discuss in 2024 budget review. The motion to approve was made by City Administrator Osage Beach, Jeana Woods and was seconded by City Administrator Osage Beach, Jeana Woods. The motion passed unanimously.
 - B. Motion to increase the Contract Management amount under Operations and Maintenance from \$354,250 to \$360,000. The motion to approve was made by City Administrator Osage Beach, Jeana Woods and was seconded by City Administrator Osage Beach, Jeana Woods. The motion passed unanimously.

ADDITIONAL DISCUSSION ITEMS:

ADJOURNMENT:-

With no further business to discuss, the meeting adjourned at 4:41 pm. Motion made by Alderman Osage Beach, Kevin Rucker to adjourn and was seconded by Public Works Operations Manager, Kevin Crooks.

Approved on:

Mayor, Dennis Newberry

Clerk, Robin Craig

JOINT SEWER BOARD
BILL LIST
NOVEMBER 15, 2022

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
OPERATING FUND BILLS TO BE PAID:	\$	41,201.40
EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:	\$	-
TOTAL	\$	41,201.40

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
4020		M/C Fastenco	Bolts for loading station	\$ -
4020		Menards	Bolts & Nuts for RAS Pumps	\$ -
4020		Xylem Water Solutions	UV Supplies	\$ -
TOTAL				\$ -

OPERATING FUND BILLS TO BE PAID:

Account	Check	Paid To:	Description:	Amount:
4000	1043	Equipment Replacement Fund	Payment into ER Fund	\$ 4,584.00
4020	1044	Grainger	Compressor	\$ 1,128.72
4020	1045	JCI Industries, Inc.	Decant LS Pump rebuild	\$ 2,250.00
4020	1046	Majestic Franchising Inc.	November	\$ 197.15
4020	1047	M/C QuickBooks	Accounting Software	\$ 30.00
4020	1048	Menards	Pipe Fittings & Guage	\$ 10.08
4020	1048	Menards	Flex Conduit & Ends	\$ 44.02
4020	1048	Menards	Hose end & vice grips	\$ 12.88
4020	1048	Menards	Tape & Paint Valve Stems	\$ 77.71
4020	1048	Menards	Paint	\$ 41.88
4170	1049	Alliance Water Resources, Inc.	November	\$ 27,590.00
4175	1050	Ameren MO	11873321	\$ 4,981.16
4175	1050	Ameren MO	98041275	\$ 89.68
4176	1051	AT&T	November	\$ 102.73
4176	1052	Republic	November	\$ 61.43
TOTAL				\$ 41,201.40

EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
4000				\$ -
4000				\$ -
TOTAL				\$ -

EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:

Account	Check	Paid To:	Description:	Amount:
4000				\$ -
4000				\$ -
TOTAL				\$ -



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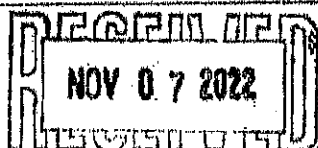
FOCUSED ENERGY. For life.

Account Number 4580005832
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD.,
LAKE OZARK, MO 66049

Current Detail for Statement 11/07/2022

Total Electric Charges \$4,981.16

Total Amount Due \$4,981.16



AMOUNT DUE \$4,981.16

Due Date 11/30/2022

Amount After Due Date \$6,030.97

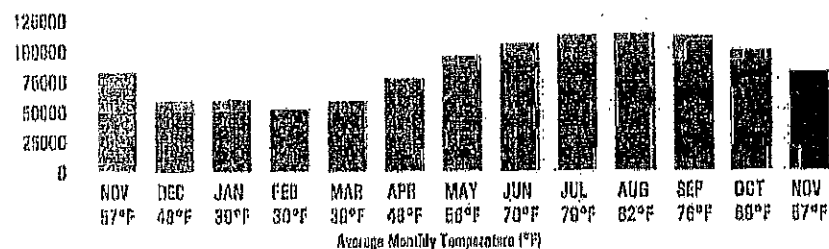
Previous Statement \$8,284.70

Total Payments \$8,284.70

Payment Received Thank You

Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using 5.7% less than last year.

2021 1,022,800 kWh

2022 964,320 kWh

Usage from Jan-Nov for 2021 & 2022

13073 02845 2141772 905276 010549 60016002

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Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in or update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.

GL Acct#: 4175

Signature: [Signature]

Date: 11/7/22

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» See next page for service details.

Page 1 of 4

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Amount Due	Due Date
\$4,981.16	November 30, 2022
Delinquent Amount After Due Date	Account Number
\$6,030.97	4580005832

Amount Enclosed \$

>002645 2141772 0001 072139 102

ALLIANCE WATER RESOURCES INC
PO BOX 1985
LAKE OZARK, MO 65049-1985

AMEREN MISSOURI
PO BOX 88088
CHICAGO IL 60680-1088

20600000 0045800058302 000004981160 000004981160



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Electric Service Details

Service from 10/05/2022 - 11/03/2022 (29 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
11873321	10/05 - 11/03	29	Total kWh	Actual	76801.0000	76899.0000	608.0000	100.0000	81280.0000
11873321	10/05 - 11/03	29	Peak kW	Actual	153.1000	153.1000	0.0000	100.0000	153.1000

Usage Summary

Total kWh	81280.0000	Non-Summer kWh	81280.0000
Peak kW	153.1000	Billing Demand	153.1000
Total Billing Demand	153.1000	October Winter Base kW	153.1000
Winter Base Demand	153.1000	Base kWh Ratio	1.0000
Base kWh (HUD)	81280.0000	Seasonal kWh (HUD)	0.0000

Rate 3M Large General Service

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Seasonal Energy Charge	0.00	kWh	@ \$ 0.03870000	\$0.00
Summer Demand Charge	153.10	kW	@ \$ 0.00000000	\$0.00
Winter Demand Charge	153.10	kW	@ \$ 2.18000000	\$333.76
Energy Charge/Hours Used	0.00	kWh	@ \$ 0.10840000	\$0.00
Base Energy Charge / Hours Used	22,805.00	kWh	@ \$ 0.06820000	\$1,520.28
Base Energy Charge / Hours Used	30,820.00	kWh	@ \$ 0.04820000	\$1,506.80
Base Energy Charge / Hours Used	27,895.00	kWh	@ \$ 0.03870000	\$1,071.80
Customer Charge				\$104.86
Fuel Adjustment Charge	81,280.00	kWh	@ \$ 0.00270000	\$218.48
Energy Efficiency Investment Charge	81,280.00	kWh	@ \$ 0.00326200	\$266.14
Renewable Energy Adjustment	81,280.00	kWh	@ \$ -0.00050000	\$-40.64
Total Service Amount				\$4,881.16
Total Electric Charges				\$4,881.16

Questions? Contact Ameren Missouri at 1.877.428.3736 or visit AmerenMissouri.com.

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 Phone Number _____

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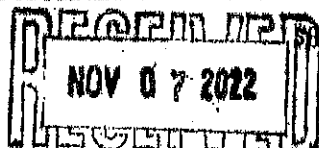
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Account Number: 8580005920
 Customer Name: ALLIANCE WATER RESOURCES INC
 Service Address: 3 ANDERSON RD
 LAKE OZARK, MO 65049

Account Detail for Statement 11/07/2022

Total Electric Charges \$89.68

Total Amount Due \$89.68



AMOUNT DUE \$89.68

Due Date 11/30/2022

Amount After Due Date \$90.68

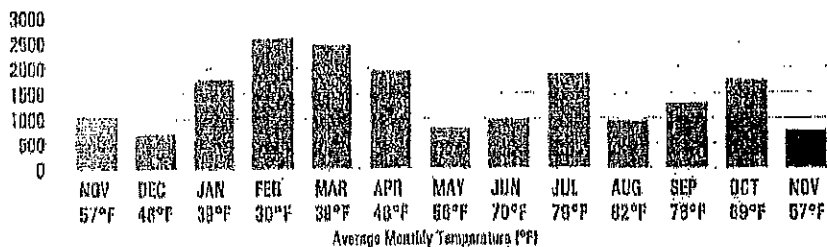
Previous Statement \$213.83

Total Payments \$213.83

Payment Received. Thank You.

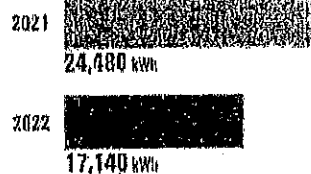
Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using 30% less than last year.



Usage from Jan-Nov for 2021 & 2022

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GL Acct#: 4475

Signature: *[Signature]*

Date: 11/7/22

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Page 1 of 4

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Amount Due	Due Date
\$89.68	November 30, 2022
Delinquent Amount After Due Date	Account Number
\$90.68	8580005920

Amount Enclosed \$

0002643 2141772 0001 092139 102

ALLIANCE WATER RESOURCES INC
 PO BOX 1985
 LAKE OZARK, MO 65048-1985

AMEREN MISSOURI
 PO BOX 88068
 CHICAGO IL 60680-1068

70633000 0055800059200 000000089680 000000089680



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Electric Service Details Service from 10/05/2022 - 11/03/2022 (29 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
90041278	10/05 - 11/03	29	Total kWh	Actual	25334.0000	25260.0000	75.0000	10.0000	750.0000
90041276	10/05 - 11/03	29	Peak kWh	Actual	10028.4120	0.0000	4.4120	10.0000	44.1200

Usage Summary

Total kWh	750.0000	Non-Summer kWh	750.0000
Winter Base kWh	1000.0000	Current Base kWh	750.0000
Winter Cur Base kWh	750.0000	Seasonal kWh	0.0000

Rate 2M 3m Gen Svc - 3 Ph w/Dmd

Threshold - Peak Demand

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Base Energy Charge	750.00	kWh	@ \$ 0.08480000	\$63.60
Seasonal Energy Charge	0.00	kWh	@ \$ 0.04080000	\$0.00
Customer Charge				\$21.86
Fuel Adjustment Charge	750.00	kWh	@ \$ 0.00270000	\$2.03
Energy Efficiency Investment Charge	750.00	kWh	@ \$ 0.00343000	\$2.57
Renewable Energy Adjustment	750.00	kWh	@ \$ 0.00050000	\$0.38
Total Service Amount				\$89.88
Total Electric Charges				\$89.88

Payments Show Previous Statement

DATE RECEIVED	AMOUNT
October 24, 2022	\$213.63

Questions? Contact Ameren Missouri at 1.877.426.3736 or visit AmerenMissouri.com.

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**MONTH-TO-DATE AND YEAR-TO-DATE
REVENUE/BUDGET ANALYSIS**

10/31/2022

Account Number	Account Name	2020 Actual	2021 Actual	2022 Budget	2022 Actual as of 10/31/2022	2022 October Revenue	Percent YTD
3020	Osage Beach	475,836.10	465,202.63	470,050.00	382,492.90	38,248.31	81%
3010	Lake Ozark	74,163.90	84,797.35	82,950.00	77,843.40	7,838.02	94%
3030	Misc.	4,500.00	22,000.00	0.00	1,094.92	0.00	0%
3100	Interest	4,019.49	2,700.22	2,500.00	1,798.66	681.25	72%
3060	Waste Haulers' Fee	39,320.00	60,520.00	56,000.00	43,670.00	2,840.00	78%
Total Operating Fund		597,839.49	635,220.20	611,500.00	506,899.88	49,607.58	83%
E/R Fund Income		8,955.85	5,508.47	5,000.00	2,775.67	367.74	56%
TOTAL INCOME		606,795.34	640,728.67	616,500.00	509,675.55	49,975.32	83%

MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
10/31/2022

Account Number	Account Name	2020 Actual	2021 Actual	2022 Budget	2022 Actual as of 10/31/2022	2022 October Expenses	Percent YTD
4000	Equipment Replace Fund	71,604.00	143,608.00	55,000.00	45,640.00	4,584.00	83%
4020	*Maintenance & Repair	26,299.38	104,853.81	142,000.00	49,529.06	1,232.29	35%
4140	Insurance	19,865.00	21,493.00	22,000.00	22,088.00	0.00	100%
4150	Vehicle Repair/Main	12,479.74	11,099.99	8,000.00	5,966.80	17.01	75%
4170	Contract Management	305,580.00	308,640.00	327,158.00	275,900.00	27,590.00	84%
4176	Electric	75,077.36	82,227.41	92,000.00	70,368.26	6,498.33	76%
4176	Utilities Misc.	2,485.59	3,528.17	3,750.00	3,364.78	166.80	90%
4190	Bank Charges	32.60	0.00	0.00	6.00	3.00	0%
4200	Audit	2,648.50	2,600.00	2,700.00	2,700.00	0.00	100%
4240	Capital Purchases	0.00	399.99	500.00	0.00	0.00	0%
	Totals	516,072.18	678,450.37	653,108.00	475,762.70	42,090.43	73%
	**E/R Expenses	85,258.27	202,161.70	59,500.00	5,885.27	0.00	10%
	TOTAL EXPENSES	601,330.45	880,612.07	712,608.00	481,647.97	42,090.43	68%

4020 DETAIL: Equip & Bldg. Repair/Main.

Auto Dialer Yrly Software Fee	500	Tier 1 X
Regular Maintenance	18,000	Tier 1
UV Bulbs, Quartz Sleeves, Misc	10,000	Tier 1 X
Concrete Steps to outfall	9,000	Tier 1 X
Rock for road	2,000	Tier 1
Parking Lot seamseal & sealco	2,500	Tier 1
Take #2 Aeration Basin, grit ren	100,000	Tier 2

142,000.00

DETAIL: Equipment & Replacement

Replace garage door in headworl	3,500	Tier 1 X
Replace wooden doors w/fibergla	2,000	Tier 1
Replace lab refrigerator/freezer	3,500	Tier 1 X
Replacement 6" valve for sludge	500	Tier 1
Replace Light Fixtures in headwc	5,000	Tier 1 X
*Replace aerator gear box - new	45,000	Tier 1

59,500.00

*Zeller Technologies, \$74,900, est completion 2023

OPERATING FUND INCOME AND EXPENSE SUMMARY
10/31/2022

Beginning Balance	323,269.56
Income - Osage Beach	38,248.31
Income - Lake Ozark	7,838.02
Income - Other	-
Income - Waste Haulers' Fees	2,840.00
Interest - Checking	12.37
Income - CD Interest	668.88
Transfers From E/R Fund	-
Transfers To E/R Fund	(4,584.00)
Expenses	(38,066.35)
Ending Fund Balance	330,226.79
Central Bank - NOW Acct.	108,602.37
	-
CD First Bank of the Lake, 11/20/23 #8432	107,465.17
CD First Bank of the Lake, 10/22/23 #8433	114,562.68
	-
Outstanding Checks:	(403.43)
	330,226.79

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
10/31/2022

Beginning Balance	512,007.90
Interest - Checking	187.42
Income - CD Interest	180.32
Transfers From Operating Fund	4,584.00
Income - Miscellaneous	-
Expenses	-
Ending Fund Balance	516,959.64
First Bank of the Lake - Money Mkt.	136,719.47
CD First Bank of the Lake, 10/31/22 #8430	110,240.17
CD First Bank of the Lake, 2/07/23 #8434	270,000.00
	-
	-
Outstanding Checks:	-
	516,959.64

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2023 Operating Budget

Cash & Equivalent Balance January 1, 2023 - Estimated

Restricted - Fund Reserves

Restricted - Other

Unrestricted

342,405

TOTAL Cash & Equivalent Balance January 1, 2023

\$ 342,405

Revenue

Osage Beach

481,940

Lake Ozark

98,710

Misc.

-

Interest

2,500

Waste Haulers' Fee

56,000

TOTAL Revenues

\$ 639,150

Expenditures

Transfer to Replacement Fund

60,000

Equipment & Building Repair/main.

93,500

Insurance

23,000

Vehicle Maintenance

8,000

Contract Management

360,000

Electric

81,000

Utilities Misc.

5,000

Bank Charges

-

Audit

2,800

Professional Services

-

Equipment Purchase - New

-

TOTAL Expenditures

\$ 633,300

Cash & Equivalent Balance December 31, 2023 - Estimated

Restricted - Fund Reserves

Unrestricted

348,255

TOTAL Cash & Equivalent Balance December 31, 2023

\$ 348,255

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2023 Operating Budget

REVENUE	FY2019 Actual	FY2020 Actual	FY2021 Actual	FY2022 Budget	FY2022 Projected Year-End	FY2023 Budget
Operating Revenue						
3020 Osage Beach - 83% - 5% INCREASE	475,092	475,836	465,203	470,050	458,980	481,940
3010 Lake Ozark - 17% - 5% INCREASE	74,908	74,164	84,797	82,950	94,010	98,710
3030 Misc.	-	4,500	22,000	-	1,095	-
3100 Interest	4,287	4,019	2,700	2,500	2,000	2,500
3030 Waste Haulers' Fee	26,260	39,320	60,520	56,000	55,000	56,000
Total Franchise Fees	\$ 580,547	\$ 597,839	\$ 635,220	\$ 611,500	\$ 611,095	\$ 639,150
Total General Fund Revenues	\$ 580,547	\$ 597,839	\$ 635,220	\$ 611,500	\$ 611,095	\$ 639,150

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Operating Budget

Expenditures	FY2019 Actual	FY2020 Actual	FY2021 Actual	FY2022 Budget	FY2022 Projected Year-End	FY2023 Budget
Operations and Maintenance						
4000 Transfer to Equip. Replace. Fund	41,604	71,604	143,608	55,000	55,000	60,000
4020 Equip & Bldg. Repair/Main.	104,063	26,299	104,853	142,000	66,000	93,500
4140 Insurance	18,761	19,865	21,493	22,000	22,088	23,000
4150 Vehicle Repair/Main.	5,480	12,480	11,100	8,000	8,000	8,000
4170 Contract Management	299,592	305,580	308,640	327,158	331,080	360,000
4175 Electric Service	73,277	75,077	82,228	92,000	78,000	81,000
4176 Utilities Misc.	3,717	2,486	3,528	3,750	4,900	5,000
4190 Bank Charges	176	33	-	-	12	-
4200 Audit	2,400	2,648	2,600	2,700	2,700	2,800
4240 Equipment - New Generator	145,247	-	400	500	-	-
Total Operations and Maintenance	\$ 694,317	\$ 516,072	\$ 678,450	\$ 653,108	\$ 567,780	\$ 633,300

4020 DETAIL: Equip & Bldg. Repair/Main.

Auto Dialer Yrly Software Fee	500
Regular Maintenance	20,000
UV Bulbs, Quartz Sleeves, Misc.	10,000
Painting RAS basement piping galary & rm	30,000
Rock for road	3,000
Sandblasting & paint Clairifier #3	30,000
	93,500

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2023 Equipment Replacement Budget

Cash & Equivalent Balance January 1, 2023 - Estimated

Restricted - Fund Reserves

Restricted - Other

Unrestricted

487,377

TOTAL Cash & Equivalent Balance January 1, 2023

\$ 487,377

Revenue

Interest

4,000

Transfer From Other Funds

60,000

TOTAL Revenues

\$ 64,000

Expenditures

Replacement

103,000

TOTAL Expenditures

\$ 103,000

Cash & Equivalent Balance December 31, 2023 - Estimated

Restricted - Fund Reserves

448,377

Restricted - Other

Unrestricted

-

TOTAL Cash & Equivalent Balance December 31, 2023

\$ 448,377

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2023 Equipment Replacement Budget

REVENUE	FY2019 Actual	FY2020 Actual	FY2021 Actual	FY2022 Budget	FY2022 Projected Year-End	FY2023 Budget
<u>Replacement Revenue</u>						
3000 Transfer from Operating	41,604	71,604	143,608	55,000	55,000	60,000
3100 Interest Earned	9,002	8,988	5,508	5,000	3,000	4,000

Total Revenue

\$ 60,606	\$ 80,590	\$ 149,116	\$ 60,000	\$ 58,000	\$ 64,000
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LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2023 Equipment Replacement Budget

EXPENDITURES	FY2019 Actual	FY2020 Actual	FY2021 Actual	FY2022 Budget	FY2022 Projected Year-End	FY2023 Budget
<u>Replacement Expenditures</u>						
4000 Replacement Expenses	\$41,281	\$85,258	\$202,162	\$59,500	50,000	103,000
	\$41,281	\$85,258	\$202,162	\$59,500	\$50,000	\$103,000

DETAIL: Equipment & Replacement

Replace wooden doors w/fiberglass	3,000
Replace flow meter for the effluent, I.O., and RAS	25,000
Replace aerator gear box - new	75,000
	<u>103,000</u>

OUR MISSION

We partner with communities to deliver the finest water and wastewater services available at a competitive price. We are committed to keeping water safe and clean while serving people and taking care of communities with improved technical operations, careful management and financial oversight and ensured regulatory compliance.

Alliance Water
Resources,
Inc.

206 S. Keene
St.
Columbia MO
65201

(573)874-8080

WATER RESOURCES® Alliance

Professional Water and Wastewater Operations

REPORT OF OPERATIONS

LAKE OZARK/OSAGE BEACH Joint Wastewater Treatment Plant No. 1

Month of October 2022

Submitted by Alliance Water Resources, Inc. for the

November 2022

Joint Sewer Board Meeting

SUMMARY OF FACILITY OPERATION

The Lake Ozark/Osage Beach Joint WWTP produced superior effluent quality throughout the month and was in full compliance with effluent limitations established in NPDES Permit No. MO-0103241. No leaks, no spills, and no unauthorized releases to waters of the state. No work-related lost time accidents have occurred during the month.

Detailed information relating to plant performance and operations is presented as follows.

PLANT EFFLUENT QUALITY

	BOD mg/l	TSS mg/l	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	2.5	3.0	N/A	10.2		0.09	< 4.8
Peak Day	2.9	5.0	7.9	< 20		0.20	< 4.8
Percent Removal	98.6	98.3	N/A	N/A		N/A	N/A

NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	30	30	6-9	126		2.5	10
Weekly Average	45	45		630			
Daily Max				N/A		12.1	15

PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 1,198 MGD or 40% of Permitted flow with Lake Ozark contributing 14% of the total flow and Osage Beach contributing 86%. Daily influent flow BOD and TSS data is presented in Table A. Daily flow for the month and rainfall are shown in Figure 2. A three-year flow history for each of the two cities is presented in Table B.

Organic loading for the month was 55354 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 42 tanker loads of bio-solids during the month equivalent to a total of 151,200 gallons and 44,405 pounds dry weight solids.

493,054 pounds of dry weight solids have been land applied year to date.

Bio-solids inventory in the storage tanks at the end of the month was 180,000 gallons with a level of 1.0 feet in Tank 1 and 3.0 feet in Tank 2.

WASTEHAULERS

The plant received 33 loads of septage during the month totaling 71,000 gallons.

WWTP OPERATIONS

- Decanting digesters and wasting weekly.
- Normal operations.

WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Antero Maintenance Data Management schedule. (New version of Operator 10 Software)
- We noticed the pista grit system was not working properly on the 3rd of October and after troubleshooting we determined that the new tube needed to be installed. We pulled the old tube on the 4th and installed the new tube on the 5th and got it back on-line the next day. We came in on the 17th and noticed the vacuum pump was locked up and non-repairable so I contacted Matt & Kevin and advised them that we needed a new pump. We ordered the pump and got it back on-line on the 20th. We noticed that it wasn't working properly again on the 31st and found that the main pump mechanical seal was leaking and have emailed some vendors for bids on replacing the seal but haven't received anything back yet.

SAFETY

- We conducted our monthly Safety Meeting on Working Alone Safety & Crane Safety on the 12th of October.

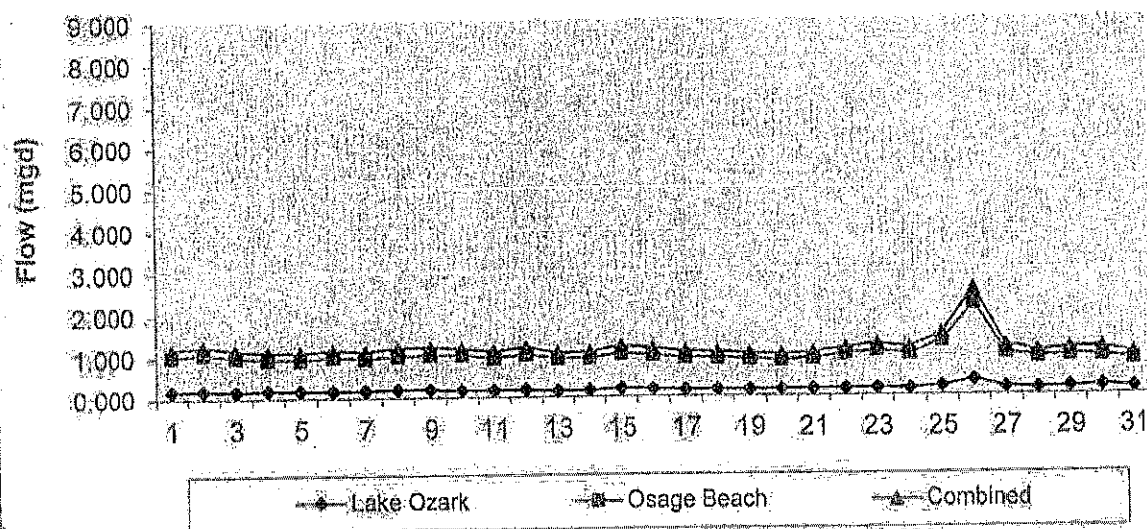
REGULATORY AGENCY, INSPECTION AND REPORTS

- We filled out the new EDMR on the EPA MoGEM website on the 9th of November.

MISCELLANEOUS AND RECOMMENDATIONS

- We are still waiting on some numbers from vendors for the 5-year CIP and hope to have them for the December Joint Sewer Board meeting if we have one. If not, we hopefully will have them for the January 2023 meeting.

Daily Flow
Figure 1



Effect of Rainfall on Flow
Figure 2

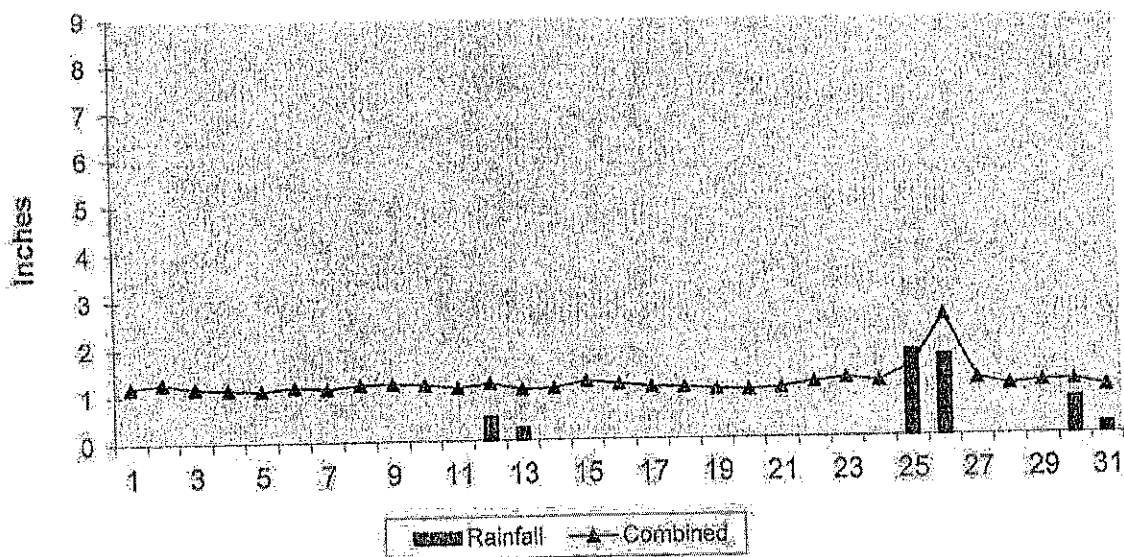


TABLE B
JOINT SEWER BOARD
Monthly Flows

2020	RAINFALL	OSAGE BEACH	LAKE OZARK	TOTAL	%
January	7.7	36,806,000 86%	5,780,000 14%	42,586,000	100%
February	3.6	31,279,000 86%	4,986,000 14%	36,265,000	100%
March	6.1	37,286,000 86%	5,888,000 14%	43,174,000	100%
April	5.2	31,967,000 88%	4,324,000 12%	36,291,000	100%
May	5.3	43,538,000 87%	6,443,000 13%	49,981,000	100%
June	4.8	50,936,000 87%	7,780,000 13%	58,716,000	100%
July	6.9	56,437,000 87%	8,616,000 13%	65,053,000	100%
August	2.3	52,449,000 87%	7,883,000 13%	60,332,000	100%
September	8.4	42,235,000 85%	7,636,000 15%	49,871,000	100%
October	5.4	33,173,000 84%	6,448,000 16%	39,621,000	100%
November	4.3	27,630,000 84%	5,102,000 16%	32,732,000	100%
December	1.3	22,749,000 85%	3,949,000 15%	26,698,000	100%

61.3	466,485,000 86%	74,835,000 14%	541,320,000	100%
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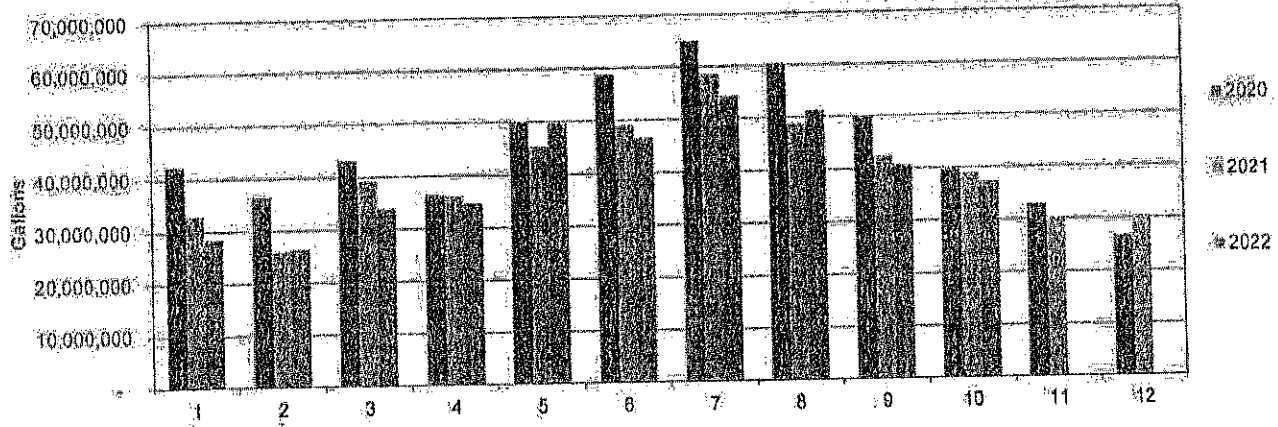
2021	RAINFALL	OSAGE BEACH	LAKE OZARK	TOTAL	%
January	6.0	28,107,000 85%	4,855,000 15%	32,962,000	100%
February	3.0	22,136,000 85%	4,048,000 15%	26,184,000	100%
March	4.0	32,848,000 84%	6,450,000 16%	39,298,000	100%
April	5.2	30,179,000 84%	5,792,000 16%	35,971,000	100%
May	5.2	37,964,000 84%	7,479,000 16%	45,443,000	100%
June	8.0	41,695,000 85%	7,390,000 15%	49,085,000	100%
July	6.9	49,378,000 85%	9,000,000 15%	58,378,000	100%
August	1.8	41,691,000 85%	7,211,000 15%	48,902,000	100%
September	3.1	36,185,000 85%	6,306,000 15%	42,491,000	100%
October	6.0	32,925,000 85%	5,987,000 15%	38,912,000	100%
November	0.8	25,192,000 83%	5,025,000 17%	30,217,000	100%
December	2.3	25,041,000 82%	5,317,000 18%	30,358,000	100%

52.2	403,341,000 84%	74,860,000 16%	478,201,000	100%
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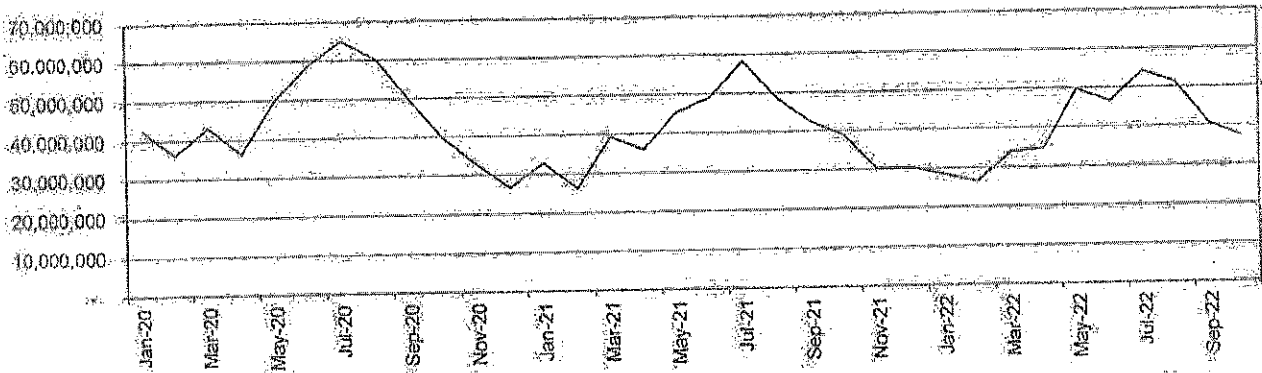
2022	RAINFALL	OSAGE BEACH	LAKE OZARK	TOTAL	%
January	1.7	23,599,000 83%	4,824,000 17%	28,423,000	100%
February	3.8	21,853,000 83%	4,610,000 17%	26,463,000	100%
March	3.2	28,266,000 83%	5,657,000 17%	33,923,000	100%
April	6.3	28,580,000 82%	6,088,000 18%	34,668,000	100%
May	9.1	41,076,000 83%	8,597,000 17%	49,673,000	100%
June	3.3	39,125,000 84%	7,563,000 16%	46,688,000	100%
July	2.6	45,728,000 84%	8,591,000 16%	54,319,000	100%
August	6.8	42,549,000 83%	8,716,000 17%	51,265,000	100%
September	2.4	34,238,000 84%	6,499,000 16%	40,737,000	100%
October	5.2	31,814,000 86%	5,317,000 14%	37,131,000	100%
November					
December					

46.3	336,828,000 84%	66,462,000 17%	403,290,000	100%
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Monthly Influent Flow
Figure 3A

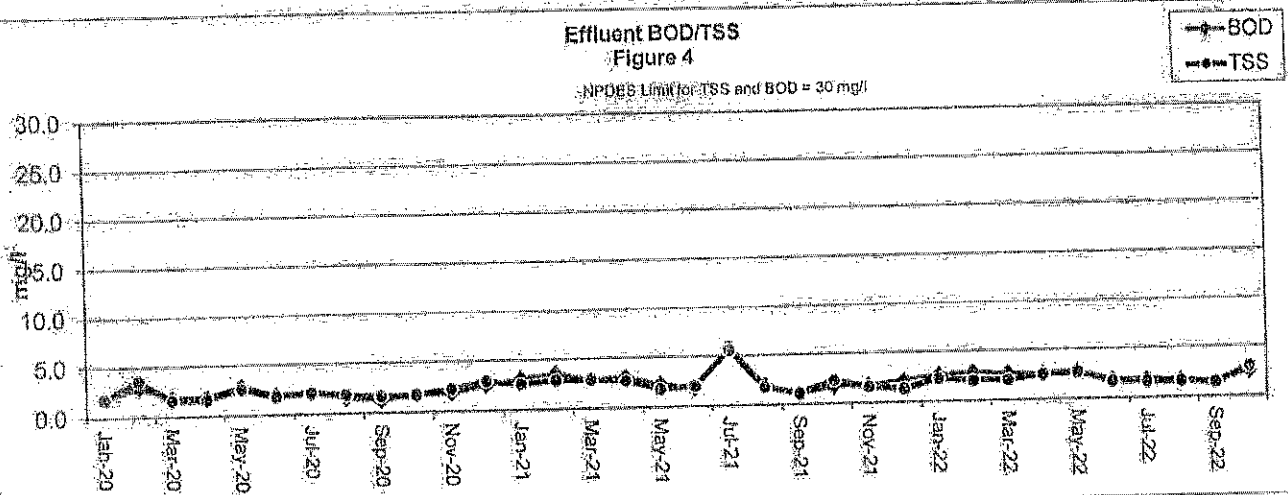


Monthly Influent Flow
Figure 3B

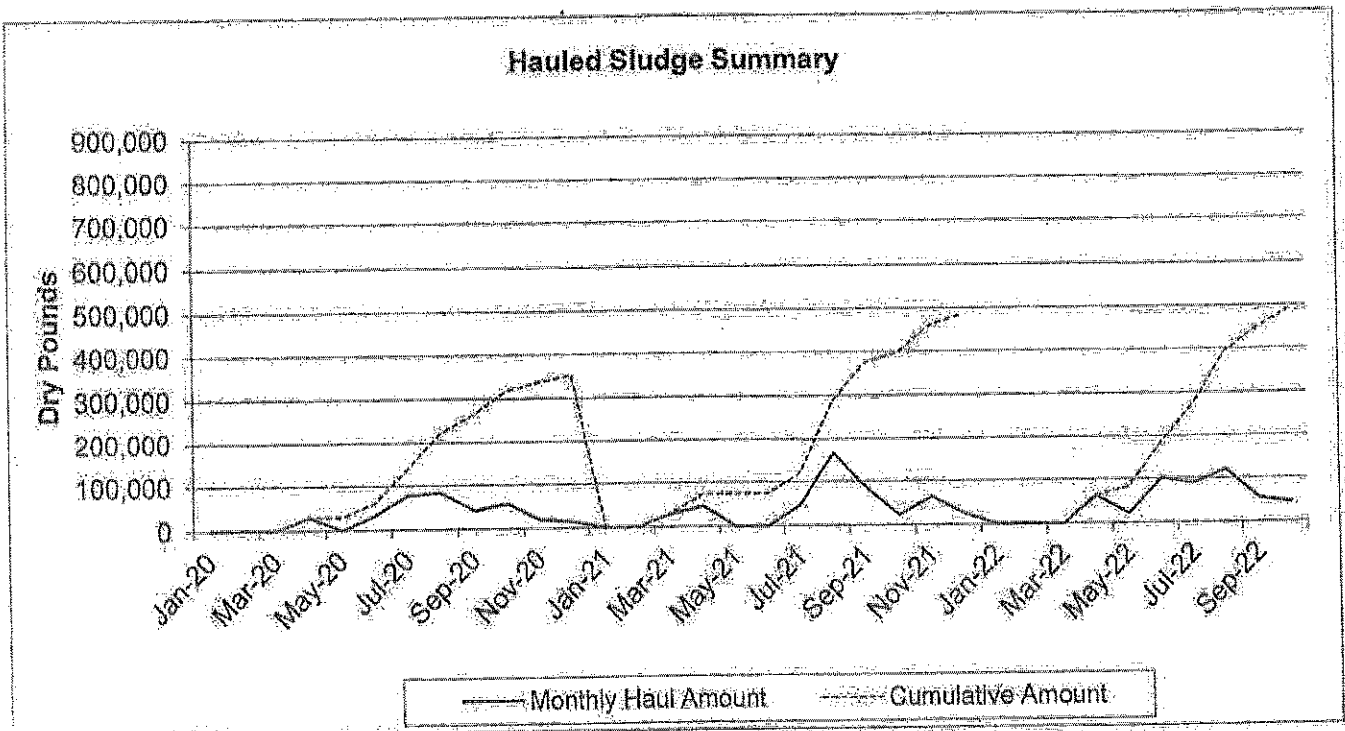
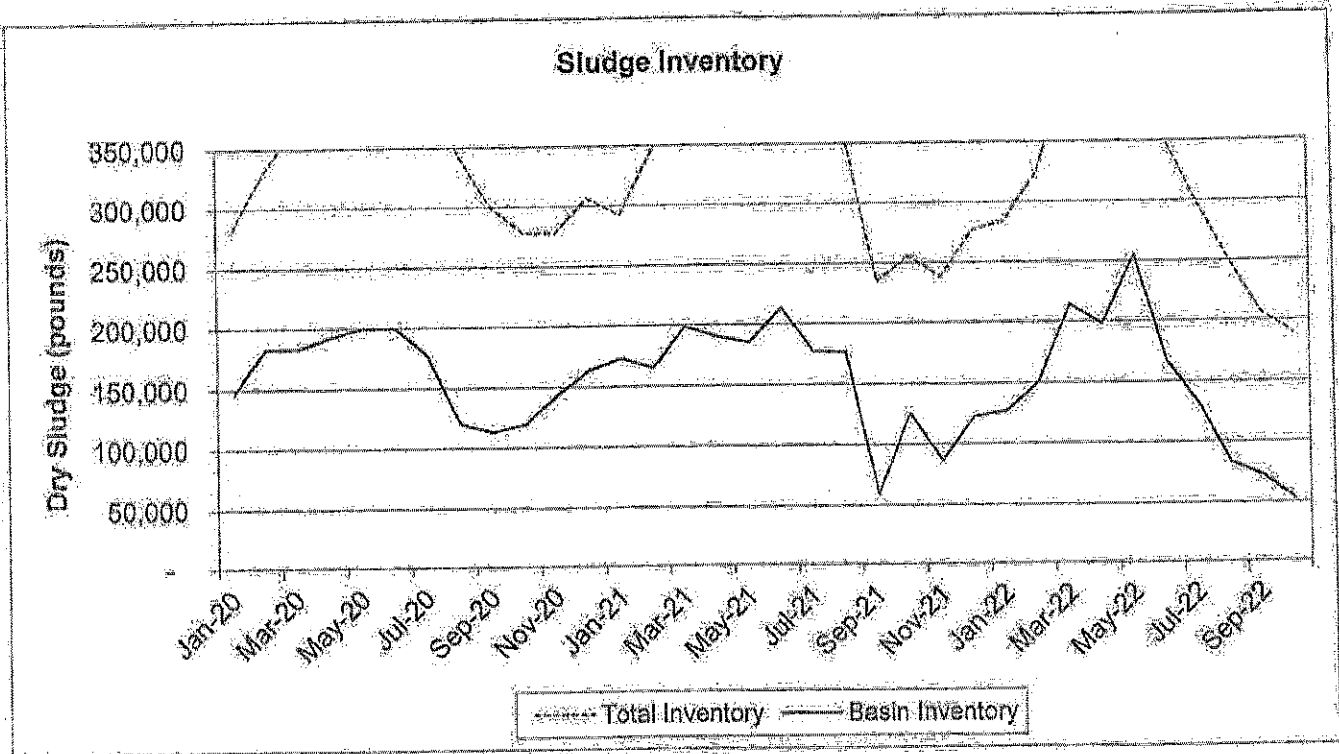


Effluent BOD/TSS
Figure 4

NPDES Limit for TSS and BOD = 30 mg/l



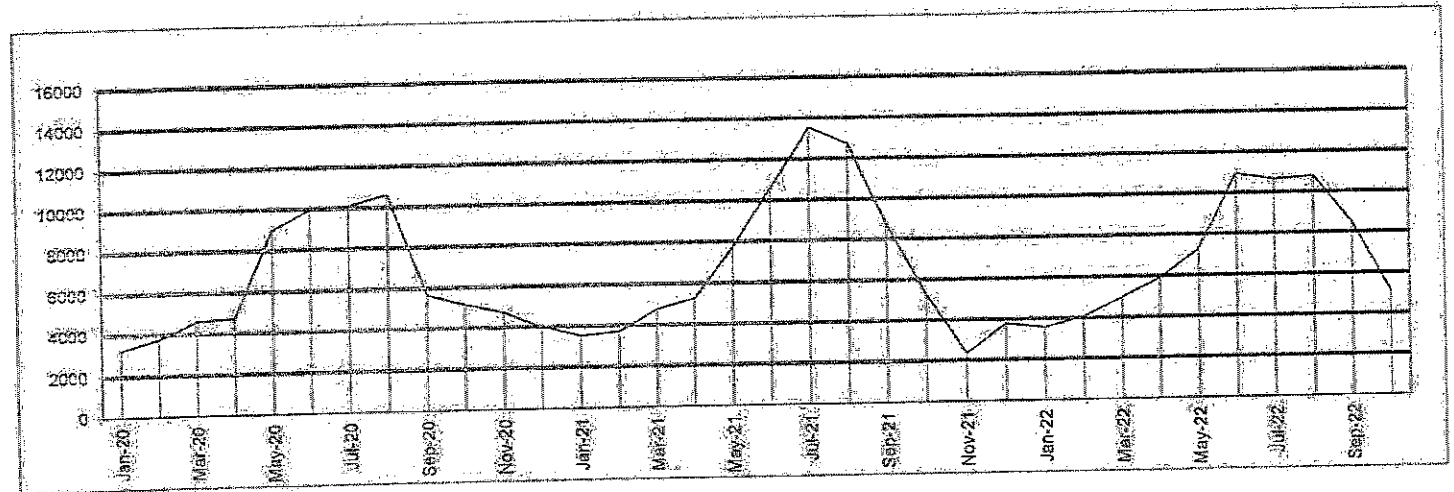
	Hauled Sludge					Basin Depths					Blanket Depths				MLSS Inventory		Blanket and MLSS Inventory		MLSS	Total Dry	Accepted Septage	
	Loads	Gallons	# Dry	% Solids	Annual Cumulative # Dry	Tank #1	Tank #2	AB #1	Basin Gallons	# Dry	Clar #1	Clar #2	Clar #3	MLSS AB #1	MLSS AB #2	Gallons	# Dry	% Solids	Sludge Inventory		Loads	Gallons
Jan-20	0	-	0	3.9%	-	6.0	4.0	0.0	450,000	148,967	1.0	1.5	0.0	4,260	4,680	3,544,405	135,015	0.00448	282,382		16	34,100
Feb-20	0	-	0	3.9%	-	6.5	6.0	0.0	582,500	182,969	3.5	2.0	0.0	5,190	4,390	3,697,691	147,718	0.00479	330,676		23	57,000
Mar-20	0	-	0	3.9%	-	5.5	7.0	0.0	582,500	182,969	2.0	5.0	1.0	5,760	5,940	3,767,762	183,825	0.00585	366,784		28	64,500
Apr-20	25	92,500	28,315	3.8%	28,315	6.0	7.5	0.0	607,500	192,528	1.0	1.0	1.0	5,740	5,290	3,878,952	189,214	0.00552	381,742		39	107,000
May-20	0	-	0	3.8%	-	6.0	8.0	0.0	630,000	199,660	1.0	7.0	1.0	6,010	6,110	3,785,524	191,322	0.00806	390,581		55	83,000
Jun-20	25	92,500	31,680	4.1%	60,975	5.0	7.0	0.0	595,000	200,226	6.0	7.0	0.5	7,050	7,120	3,852,620	227,547	0.00709	427,875		68	18,000
Jul-20	68	255,300	77,268	3.6%	138,243	6.0	7.0	0.0	586,000	177,054	6.0	8.0	1.0	6,690	7,380	3,892,086	231,503	0.00714	408,698		88	208,000
Aug-20	76	281,200	83,288	3.6%	221,529	5.0	4.0	0.0	405,000	119,963	6.0	8.0	1.0	6,530	7,400	3,856,572	224,021	0.00697	343,974		67	153,000
Sep-20	38	140,600	41,627	3.5%	263,156	5.0	3.0	0.0	380,000	119,563	1.0	1.0	0.5	6,000	6,200	3,657,238	186,038	0.0051	299,304		45	104,500
Oct-20	45	166,500	55,288	4.0%	318,454	4.0	4.5	0.0	405,000	119,963	1.0	1.0	1.0	4,960	5,070	3,678,952	158,015	0.00515	277,578		16	32,000
Nov-20	18	66,600	19,255	3.5%	337,709	5.0	6.0	0.0	495,000	143,111	1.0	0.0	0.5	4,780	4,080	3,639,476	134,455	0.00443	277,576		18	35,000
Dec-20	11	40,700	14,843	4.4%	352,552	4.5	5.5	0.0	450,000	164,132	1.0	0.0	0.5	5,030	4,350	3,639,476	142,508	0.0047	306,620		33	69,000
Jan-21	0	-	0	4.4%	-	7.0	3.5	0.0	472,500	173,389	6.0	0.0	1.0	3,810	3,780	3,750,000	118,669	0.0038	292,077		83	205,500
Feb-21	0	-	0	4.4%	-	5.0	5.0	0.0	450,000	165,132	5.0	8.0	0.0	5,490	5,750	3,890,906	179,558	0.00582	344,690		28	63,500
Mar-21	23	85,100	28,883	4.1%	28,883	6.0	7.0	0.0	585,000	199,549	2.0	5.0	0.5	6,830	6,330	3,746,048	205,573	0.00658	404,122		32	70,000
Apr-21	39	144,300	45,269	3.2%	74,152	6.0	7.5	0.0	507,500	190,582	12.0	5.0	1.0	6,890	6,350	3,945,382	201,375	0.00612	391,957		22	52,000
May-21	0	-	0	3.8%	-	6.0	7.0	0.0	585,000	185,398	13.0	14.0	1.0	6,200	6,330	4,123,002	215,427	0.00627	400,825		48	128,500
Jun-21	0	-	0	3.8%	-	7.0	8.0	0.0	675,000	213,921	6.0	7.5	2.0	7,260	8,080	3,926,643	234,903	0.00717	448,824		63	151,500
Jul-21	40	144,000	47,378	3.9%	121,630	5.0	7.0	0.0	540,000	177,668	7.0	12.0	3.0	9,190	8,110	4,087,762	279,340	0.00823	457,007		117	289,000
Aug-21	153	560,800	166,353	3.6%	287,893	7.0	6.0	0.0	585,000	176,693	1.0	1.0	0.5	6,160	5,840	3,657,238	183,008	0.0060	359,701		68	163,000
Sep-21	92	331,200	87,226	3.2%	375,119	2.0	3.0	0.0	225,000	59,257	1.0	1.0	0.5	5,320	6,180	3,657,238	175,383	0.0058	234,640		52	159,500
Oct-21	17	61,200	22,698	4.4%	397,817	3.5	4.0	0.0	225,000	125,173	1.0	0.8	0.5	4,430	4,140	3,848,357	130,381	0.0043	265,554		34	80,000
Nov-21	46	166,600	63,621	4.6%	461,438	3.0	2.0	0.0	225,000	96,442	0.5	1.0	0.0	5,130	4,660	3,826,643	152,138	0.0050	238,580		37	83,000
Dec-21	16	57,600	24,139	5.0%	485,577	4.0	2.5	0.0	292,500	122,581	1.0	1.0	0.0	4,540	5,630	3,635,524	154,178	0.0051	276,759		27	62,000
Jan-22	0	-	0	4.5%	-	4.5	3.0	0.0	337,600	126,664	1.0	3.5	0.0	5,080	5,180	3,679,629	157,138	0.0051	283,800		13	27,000
Feb-22	0	-	0	4.0%	-	7.0	3.0	0.0	450,000	150,120	4.0	1.5	0.0	6,280	5,030	3,697,691	174,393	0.0057	324,513		32	68,000
Mar-22	0	-	0	4.4%	-	6.0	7.0	0.0	585,000	214,672	3.0	10.0	0.0	5,870	5,780	3,937,478	190,464	0.0058	405,135		23	48,000
Apr-22	47	169,200	62,120	4.4%	62,120	7.0	5.0	0.0	540,000	198,255	10.0	10.0	1.0	7,100	5,600	3,998,668	211,765	0.0064	410,021		52	124,500
May-22	16	57,600	21,017	4.4%	83,137	6.5	7.0	0.0	697,500	254,503	2.0	10.0	1.0	6,290	6,630	3,956,572	207,778	0.0065	462,281		37	85,000
Jun-22	84	302,400	102,052	4.0%	185,189	7.0	4.0	0.0	495,000	167,049	4.6	0.5	1.5	5,780	6,010	3,753,952	184,247	0.0059	351,297		42	93,500
Jul-22	80	288,000	88,951	3.7%	274,150	7.0	2.5	0.0	427,500	132,051	8.0	3.0	1.5	4,740	5,860	3,860,524	166,296	0.0052	298,348		39	68,500
Aug-22	108	368,800	120,426	3.7%	394,576	2.0	4.0	0.0	270,000	83,629	1.5	1.0	0.5	5,490	5,420	3,666,119	166,788	0.0055	260,418		168	300,000
Sep-22	51	183,600	54,073	3.5%	448,649	3.5	2.0	0.0	247,500	72,693	1.0	1.0	0.5	4,850	4,160	3,657,238	134,359	0.0044	207,251		76	166,000
Oct-22	42	161,200	44,405	3.6%	493,054	1.0	3.0	0.0	180,000	52,863	0.5	0.5	0.5	4,590	4,390	3,639,476	135,285	0.0045	189,149		33	71,000



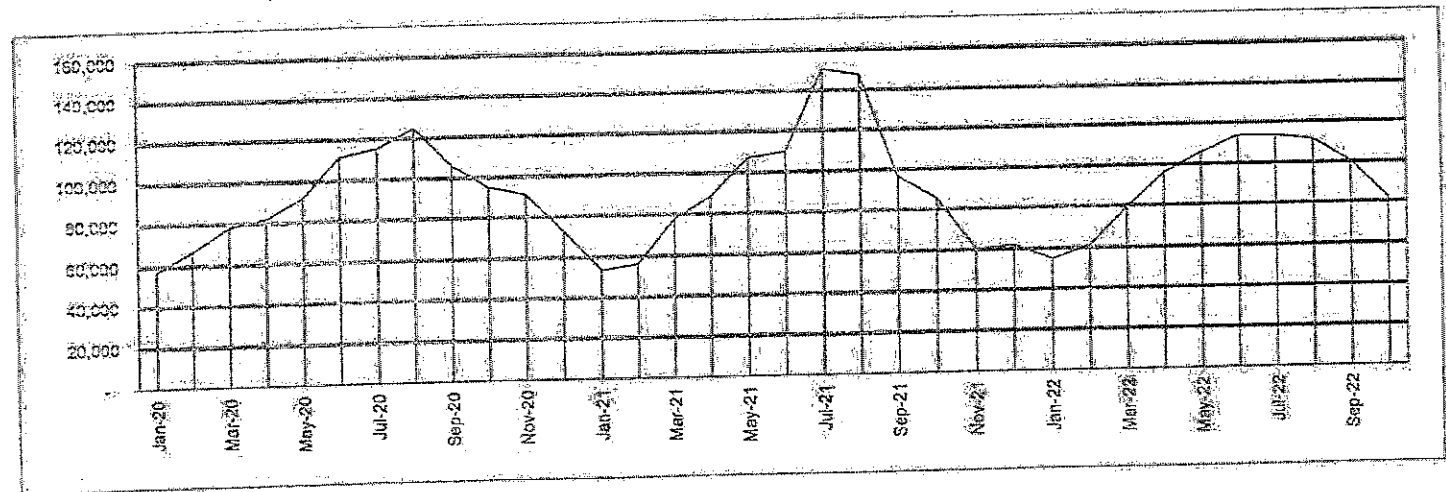
Electric Cost Kilowatts Used

Jan-20	3259	57,250
Feb-20	3760	66,830
Mar-20	4637	78,070
Apr-20	4741	81,780
May-20	8962	91,550
Jun-20	9959	111,880
Jul-20	10100	115,300
Aug-20	10619	124,800
Sep-20	5669	106,220
Oct-20	5155	94,870
Nov-20	4734	90,890
Dec-20	4009	73,020
Jan-21	3524	53,730
Feb-21	3696	56,370
Mar-21	4776	77,720
Apr-21	5281	88,390
May-21	7727	107,320
Jun-21	10610	110,130
Jul-21	13533	150,740
Aug-21	12737	147,810
Sep-21	8751	96,600
Oct-21	5233	85,530
Nov-21	2348	60,370
Dec-21	3776	62,100
Jan-22	3547	55,070
Feb-22	4063	61,330
Mar-22	4979	79,050
Apr-22	5907	96,160
May-22	7292	106,100
Jun-22	10958	113,870
Jul-22	10648	113,590
Aug-22	10800	111,690
Sep-22	8498	100,470
Oct-22	5071	82,030

Electric Cost



Kilowatts Used





MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
 Discharge Monitoring Report For Municipal Wastewater Treatment Plants

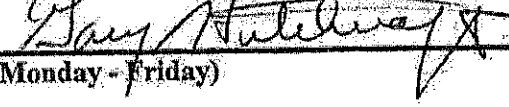
NAME OF FACILITY						LOCATION ADDRESS & CITY						COUNTY/REGION			
Lake of the Ozarks Regional WWTP #1						#3 Anderson Road						Miller/SWRO			
MONTH/YEAR		PERMIT NUMBER				OUTFALL NUMBER		TYPE TREATMENT FACILITY							
Oct-22		MO-0103241				#001		Oxidation Ditch/UV/Sludge Holding-sludge is land applied							
INFLUENT						EFFLUENT								% Removal	
DATE	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N mg/l	TEMP °C	FLOW MGD	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N mg/l	DO mg/L	E. coli COLFRM #/100 ML	TEMP °C	BOD mg/L	TSS mg/L
1	7.1				19.7	1.577	7.7				9.6		18.0		
2	6.9				20.2	1.593	7.6				9.6		18.1		
3	7.2				20.9	1.507	7.6				9.5	< 20	18.8		
4	7.1				19.4	1.458	7.6				9.5		18.3		
5	6.9	155	116	26.9	21.1	1.477	7.5	2.6	5.0	0.05	9.4		19.0	98.3	95.7
6	6.9				20.8	1.522	7.6				9.4		18.9		
7	7.0				20.4	1.389	7.5				9.5		19.0		
8	7.2				19.2	1.374	7.9				9.6		17.3		
9	7.3				16.0	1.634	7.9				9.7		16.5		
10	7.3				19.0	1.543	7.8				9.6		17.4		
11	6.9				20.8	1.454	7.6				9.3	< 20	19.2		
12	6.9			25.6	20.8	1.610	7.6			0.05	9.1		19.1		
13	7.1				19.9	1.440	7.7				9.4		18.2		
14	7.2	200	192		19.6	1.459	7.7	2.0	2.7		9.5		17.7	99.0	98.6
15	7.2				18.5	1.435	7.4				9.6		16.5		
16	7.2				18.9	1.514	7.5				9.5		16.5		
17	7.0				18.1	1.448	7.6				9.8	< 20	16.4		
18	7.2				17.8	1.487	7.7				10.2		14.6		
19	7.0			25.0	17.7	1.471	7.6			0.07	10.7		13.8		
20	7.0				17.5	1.466	7.7				10.2		13.9		
21	7.1	195	236		17.2	1.456	7.6	2.9	3.3		10.1		15.1	98.5	98.6
22	7.2				18.0	1.416	7.6				9.9		15.8		
23	7.0				20.0	1.621	7.7				9.4		17.8		
24	7.3				20.2	1.485	7.9				9.3		18.7		
25	7.2			14.9	19.3	1.730	7.9			0.20	9.3	10.8	18.3		
26	7.1				16.5	3.174	7.5				9.6		15.9		
27	7.1				17.2	1.654	7.4				9.9		16.0		
28	7.1	165	182		17.6	1.543	7.7	2.4	1.1		10.1		15.6	98.5	99.4
29	7.0				17.8	1.642	7.6				10.1		16.0		
30	7.0				18.5	1.587	7.4				10.0		16.7		
31	7.0				18.1	1.459	7.6				9.8		16.6		
Total						48.605									
Avg		179	182	23.1	18.9	1.568		2.5	3.0	0.09	9.7	10.2	17.1	98.6	98.1
Min	6.9	155	116	14.9	16.0	1.374	7.4	2.0	1.1	0.05	9.1	< 20	13.8	98.3	95.7
Max	7.3	200	236	26.9	21.1	3.174	7.9	2.9	5.0	0.20	10.7	10.8	19.2	99.0	99.4

MONTHLY EFF MONITORING				QUARTERLY EFF MONITORING				MONTHLY INF MONITORING		
DATE	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L	Oil & Grease mg/L	TR. Cadmium mg/L	Selenium mg/L	Hardness mg/L	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L
1										
2										
3										
4										
5	6.8	1.6	27.3	≤ 4.8	≤ 5.0	≤ 15.0	324	6.1	31.0	≤ 0.10
6										
7										
8										
9										
10										
11										
12										
13										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Total	6.8	1.6	27.3	≤ 4.8	≤ 5.0	≤ 15.0	324	6.1	31.0	≤ 0.10
Avg	6.8	1.6	27.3	≤ 4.8	≤ 5.0	≤ 15.0	324	6.1	31.0	≤ 0.10
Min	6.8	1.6	27.3	≤ 4.8	≤ 5.0	≤ 15.0	324	6.1	31.0	≤ 0.10
Max	6.8	1.6	27.3	≤ 4.8	≤ 5.0	≤ 15.0	324	6.1	31.0	≤ 0.10

OPERATIONAL CONTROLS/LABORATORY TEST REQUIRED FOR "ACTIVATED SLUDGE" PROCESSES

DATE	SLUDGE DISP. LBS. DRY WEIGHT	#1 Aeration Basin, O-Ditch, Etc.				#2 Aeration Basin, O-Ditch, Etc.				*Weather Conditions		
		MIXED LIQUOR				MIXED LIQUOR				* Ambient Temp ° F	*RAIN Inches	Time
		* DO mg/l	** MLSS mg/l	*Settleability		* DO mg/l	** MLSS mg/l	*Settleability				
				*30 min ml	Temp ° C			*30 min ml	Temp ° C			
1		3.4	4,650	580	17.4	4.2	3,730	500	17.8	49	0	7:30
2		3.0	4,550	580	17.7	4.1	4,250	450	18.0	50	0	7:30
3		2.7	4,280	400	18.7	2.6	4,510	450	18.7	50	0	7:30
4		2.0	4,720	360	17.6	2.2	3,830	380	18.0	48	0	7:30
5	4,323	2.2	4,700	320	18.4	2.1	3,890	280	18.8	50	0	7:30
6	6,665	2.4	4,610	300	18.7	2.2	3,990	280	18.9	56	0	7:30
7		2.4	4,050	260	18.8	1.9	4,140	280	19.2	56	0	7:30
8		3.7	4,700	260	16.6	4.3	4,340	280	17.3	45	0	7:30
9		3.1	4,280	290	15.4	3.8	4,220	260	16.0	43	0	7:30
10		2.9	4,230	300	17.6	2.8	3,990	250	17.5	53	0	7:30
11		2.0	3,440	240	19.3	2.4	4,660	320	19.3	64	0.2	7:30
12		2.5	2,700	220	19.1	2.4	4,620	320	19.1	62	0.5	7:30
13		3.5	4,440	280	17.5	3.7	2,200	230	17.9	52	0	7:30
14	7,926	2.4	4,280	270	17.0	2.2	4,270	280	17.5	46	0	7:30
15		4.2	3,260	270	16.0	4.3	3,260	230	16.6	48	0	7:30
16		3.8	4,750	270	16.3	4.5	3,700	240	16.8	50	0	7:30
17		2.2	3,360	300	15.5	3.1	3,080	230	15.6	45	0	7:30
18	5,254	3.6	3,990	310	14.2	5.0	3,630	240	14.7	35	0	7:30
19	5,104	3.4	4,270	300	13.3	6.8	3,080	250	13.5	33	0	7:30
20	7,566	2.8	4,440	320	13.7	5.0	3,850	250	13.9	37	0	7:30
21	7,566	1.6	4,470	300	15.1	3.2	3,920	250	15.1	44	0	7:30
22		2.0	3,730	270	15.9	4.0	4,170	290	14.8	57	0	7:30
23		5.3	3,080	230	18.0	3.3	4,670	300	17.7	67	0	7:30
24		1.5	3,320	230	19.3	1.4	4,500	350	19.1	70	0	7:30
25		1.4	3,170	220	18.0	1.6	3,330	300	18.0	54	1.8	7:30
26		1.6	2,940	220	16.3	1.5	4,130	300	16.5	43	1.7	7:30
27		2.4	3,840	280	15.9	1.9	4,250	330	16.4	42	0	7:30
28		3.2	3,750	280	14.8	3.0	4,370	340	15.5	42	0	7:30
29		2.6	4,600	360	15.7	3.3	3,740	270	16.0	50	0	7:30
30		1.8	4,100	400	16.8	3.4	3,620	270	16.8	50	0.75	7:30
31		1.5	4,590	350	16.6	4.1	4,390	310	16.8	57	0.2	7:30

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback		(573)365-0455	11/9/2022
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft		(573)365-0455	11/9/2022

*Required Daily (Monday - Friday)

**Required 1/week

Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

Permit Number	Outfall Number
MO0103241	001M
Monitoring Period	
10/1/22	10/31/22
NODI:	*****

Parameters	Reporting Requirements			Unit	Reporting Requirements		Unit
Flow, in conduit or thru treatment plant	*****	*****	*****	*****	3,174	1,568	Mgal/d
Mon. Location: End of Pipe	*****	*****	*****		Daily Max.: Monitoring Required	Monthly Avg.: Monitoring Required	
Sample Type: Total Measured							
Frequency: Daily							
BOD, 5-day, 20 deg. C	*****	2.9	2.5	mg/L	*****	*****	*****
Mon. Location: End of Pipe	*****	Weekly Avg.: 45	Monthly Avg.: 30		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Weekly							
Total Suspended Solids (TSS)	*****	5.0	3.0	mg/L	*****	*****	*****
Mon. Location: End of Pipe	*****	Weekly Avg.: 45	Monthly Avg.: 30		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Weekly							
Escherichia coli (E. coli)	*****	<20	10.2	#/100mL	*****	*****	*****
Mon. Location: End of Pipe	*****	7 Day Geo.: 630	30 Day Geo. Mean: 126		*****	*****	
Sample Type: Grab							
Frequency: Weekly							
Phosphorus, total (as P)	6.8	*****	6.8	mg/L	*****	*****	*****
Mon. Location: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, Kjeldahl, total (as N)	1.6	*****	1.6	mg/L	*****	*****	*****
Mon. Location: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrite plus nitrate total (as N)	27.3	*****	27.3	mg/L	*****	*****	*****
Mon. Location: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, ammonia total (as	0.20	*****	0.09	mg/L	*****	*****	*****

Lake of the Ozarks Regional
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State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P.O. Box 176
Jefferson City, MO, 65102

N)	Mon. Location: End of Pipe Sample Type: 24 Hour Composite Frequency: Weekly	Daily Max: 12.1	*****	Monthly Avg: 12.5	*****	*****	*****
pH	Mon. Location: End of Pipe Sample Type: Grab Frequency: Weekly	7.4 Minimum: 6.0	*****	7.9 Maximum: 9.0	SU	*****	*****
BOD, 5-day, percent removal	Mon. Location: End of Pipe Sample Type: Calculated Frequency: Monthly	*****	*****	98.3 Monthly Avg. Min.: 85	%	*****	*****
Suspended Solids, percent removal	Mon. Location: End of Pipe Sample Type: Calculated Frequency: Monthly	*****	*****	95.7 Monthly Avg. Min.: 85	%	*****	*****

Comments:

Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P.O. Box 176
Jefferson City, MO, 65102

Permit Number	Outfall Number
MO0103241	INFIM
Monitoring Period	
10/1/22	10/31/22
NODR	*****

Parameters	Reporting Requirements			Unit	Reporting Requirements			Unit
BOD, 5-day, 20 deg. C	*****	*****	179	mg/L	*****	*****	*****	
Mon. Location: Influent	*****	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Total Suspended Solids (TSS)	*****	*****	182	mg/L	*****	*****	*****	
Mon. Location: Influent	*****	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrogen, ammonia total (as N)	26.9	*****	23.1	mg/L	*****	*****	*****	
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Phosphorus, total (as P)	6.1	*****	6.1	mg/L	*****	*****	*****	
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrogen, Kjeldahl, total (as N)	31.0	*****	31.0	mg/L	*****	*****	*****	
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrite plus nitrate total (as N)	<0.10	*****	<0.10	mg/L	*****	*****	*****	
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								

Comments:

Lake of the Ozarks Regional
WWTP #1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P.O. Box 176
Jefferson City, MO, 65102

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

eSignature Gary Hutchcraft	Submission Date November 9, 2022	User Phone Number (573)365-0455
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Lake of the Ozarks Regional
WWTP-1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

Permit Number	Outfall Number
MO0103241	001Q
Monitoring Period	
10/1/22	12/31/22
NOD:	*****

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Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

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eSignature Gary Hutchcraft	Submission Date November 9, 2022	User Phone Number (573)365-0455
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INDEX



2022 Regulatory Compliance Report

Mark Mahler, Director of Safety & Regulatory Compliance

Alliance tracks new and proposed legislative and regulatory issues on an ongoing basis on behalf of its clients. This quarterly report identifies some of the most impactful issues at the Federal and State levels.

3rd Quarter 2022, Federal

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by EPA and consensus organizations. This action provides EPA and other interested parties with scientifically valid data on the national occurrence of these contaminants in drinking water. Consistent with EPA's PFAS Strategic Roadmap, UCMR 5 will provide new data that is critically needed to improve EPA's understanding of the frequency that 29 PFAS (and lithium) are found in the nation's drinking water systems and at what levels.

Which water systems will participate in UCMR 5?

EPA requires all public water systems serving more than 3,300 people monitor for the contaminants in UCMR 5. EPA also will ensure that a nationally representative sample of systems serving fewer than 3,300 people monitor.

What does UCMR 5 participation involve? Who pays?

All systems required to participate in UCMR 5 will collect samples. As with previous UCMRs, large systems serving more than 10,000 people make arrangements with approved laboratories and pay for their own sample shipping and analytical costs; EPA arranges and pays for small-system samples.

What are the key deadlines and requirements?

December 31, 2022 - Systems must register, accept their notification letter and update sampling location(s), shipping address, and zip code(s). Systems must provide an explanation and obtain approval for any requested monitoring schedule change.

Systems scheduled for sample collection in 2023 are encouraged to submit ground water representative monitoring plans by December 31, 2022, to allow time for review by EPA and, as appropriate, the State.

Lead & Copper Rule – The EPA has relayed to the states the following possible changes that will be in the LCRL.

- Replacement of both publicly and privately owned lead service lines within 10 years with major sources of funding to become available.
- Reduce the complexity of the rule.
- Prioritize disadvantaged communities.
- Guidance coming soon through a webpage being created by EPA.



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3rd Quarter 2022, Missouri

New Asset Management Toolkit Available at No Cost. The Missouri Department of Natural Resources Financial Assistance Center issued a State Revolving Fund Technical Assistance grant to develop an Asset Management Toolkit. The Toolkit includes an Excel file for cataloging assets and guidance documents to describe the administrative processes for implementing Asset Management. Utilities can use the Toolkit to catalog and describe the condition of current equipment, evaluate the consequences of asset failure, evaluate the risk associated with asset failure and plan budgets and retrofit projects with a risk-based model. The AM tool can be viewed and downloaded from the department's Wastewater Systems Resiliency webpage at <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater/construction-engineering/wastewater-system-resiliency>. Additional modules are included that present supporting information such as assessment and inventory plans, risk and rehabilitation forecasting plans and implementation plans.