

**OSAGE BEACH / LAKE OZARK
JOINT SEWER BOARD MEETING
AGENDA
November 16, 2021 @ 4:00 p.m.
LAKE OZARK CITY HALL**

1. CALL TO ORDER

2. ROLL CALL

Mayor, Osage Beach, John Olivarri
Mayor, Lake Ozark, Dennis Newberry
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 19, 2021

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4. REPORTS

Bill List	3-11
Revenue Budget Analysis	12
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Income & Expense Summary	14

October Alliance Report of Operations	15-34
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Approval of Flow Charts October 2021

5. OLD BUSINESS

A. 2022 Proposed Budget review	35-38
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6. NEW BUSINESS None at this time

7. ADDITIONAL DISCUSSION ITEMS

8. ADJOURNMENT

THE NEXT MEETING WILL BE DECEMBER 21, 2021 4:00 PM @ LAKE OZARK CITY HALL

**LAKE OZARK-OSAGE BEACH
JOINT SEWER BOARD**
Meeting Minutes – October 19, 2021

CALL TO ORDER:

Mayor John Olivarri called the meeting to order at 4:00 pm on Tuesday, October 19, 2021, at Lake Ozark City Hall.

ROLL CALL:

Mayor, Osage Beach, John Olivarri- Present
Mayor, Lake Ozark, Dennis Newberry - Present
City Administrator Osage Beach, Jeana Woods – Present
City Administrator Lake Ozark, Dave Van Dee – 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
Member at Large, Mr. Gary Hamner – Present

MINUTES:

Alderman Thompson motioned to approve the meeting minutes of October 19, 2021. Her motion was seconded by Administrator Woods and passed unanimously.

REPORTS:

The September Bill list and Revenue Budget, Expenditure Budget Analysis, Income & Expense Summary were reviewed. A Motion was made by Alderman Kevin Rucker to approve the documents and pay the bills. His motion was seconded by Member at Large Hamner and was passed unanimously.

Alliance Report of Operations: The average daily incoming flow for September was 1.416 mgd. We had 3.1 inches in September of precipitation measured at the WWTP.

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD and TRSS of 2.0 mg/l and 1.8 mg/l respectively for September which represents a 98.9 + % or better removal.

The MLSS average for both aeration basins was 6,143 mg/l in September. The total dry weight sludge inventory for September totaled 234,640 pounds. There were 92 tanker loads of biosolids or 331,200 gallons land applied in September. We received 62 loads of septage or 159,500 gallons for September.

APPROVAL OF FLOW CHART

Motion was made by Administrator Van Dee to approve the Flow Chart for September. His motion was seconded by Alderman Thompson. Unanimous approval, motion passed.

OLD BUSINESS:

- A. Operations Manager Crooks is looking into decreasing flow from Osage Beach at the plant. He is checking the meter that was replaced in August 2020. Member at Large Hamner reviewed his flow analysis. Discussion ensued.

NEW BUSINESS:

- A. Review of the bids for spare UV parts, air cylinders and sleeves - We received bids from five vendors for some replacement UV bulbs, quartz sleeves & air cylinders which can be found on page 33 of the JSB packet. Recommendation for the bid from JHB. Motion to approve made by Alderman Thompson. Her motion was seconded by Mayor Newberry and was passed unanimously
- B. Review of the bids for rebuilding of the three RAS pumps - We received bids from seven vendors for the rebuilding of three RAS pumps which can be found on page 34 of the JSB packet. Recommendation for the bid from JCI, in the amount of \$6,900.00. Motion to approve made by Alderman Rucker. His motion was seconded by Administrator Van Dee and was passed unanimously.
- C. 2021 Budget Amendment. Treasurer Bell explained. After discussion, a motion was made by Administrator Woods to approve the Budget Amendment. Her motion was seconded by Alderman Thompson and was then unanimously approved.
- D. 2022 Proposed Budget. Treasurer Bell explained the budget proposed in the packet is a workbook for the Board to consider. Review and discussion ensued. The budget will be brought to the next meeting for action.

ADDITIONAL DISCUSSION ITEMS:

The supply chain was discussed. Mr. Hutchcraft advised that he has access to everything the plant requires. He keeps a backup of everything necessary to maintain the plant.

ADJOURNMENT:

With no further business to discuss, the meeting adjourned at 4:41 p.m.

Mayor, John Olivarri

Clerk, Robin Craig

JOINT SEWER BOARD
BILL LIST
NOVEMBER 16, 2021

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
OPERATING FUND BILLS TO BE PAID:	\$	50,155.21
EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:	\$	-
TOTAL	\$	50,155.21

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
4020				\$ -
TOTAL				\$ -

OPERATING FUND BILLS TO BE PAID:

Account	Check	Paid To:	Description:	Amount:
4000	488	Equipment Replacement Fund	Payment into ER Fund	\$ 10,134.00
4020	489	CED	Breaker & Fuses for Bar Screen	\$ 578.75
4020	490	Jani King	November	\$ 197.15
4020	491	John Henry Foster	Wiper Cyclinders for UV	\$ 3,182.98
4020	492	M/C Quickbooks	Accounting Software	\$ 12.50
4020	493	Martin Energy Group	Bi-Annual Service Agreement	\$ 1,023.22
4020	494	Menards	PVC Fitting for UV Drying Bed	\$ 0.98
4020	495	Tyler Truesdell	Chain Link Fence Repair	\$ 3,400.00
4150	496	Clark Tire Co	Sludge Trk Tire Repair	\$ 143.00
4150	496	Clark Tire Co	Sludge Trk Tire Repair	\$ 152.95
4150	497	Lake Sun Leader	Advertise sale of Truck	\$ 38.25
4150	498	Tri State Truck Center	Clearance Light/Sludge Trk	\$ 260.96
4150	498	Tri State Truck Center	Return 1 light	\$ (130.48)
4170	499	Alliance Water Resources, Inc.	Oct.	\$ 25,720.00
4175	500	Ameren MO	11673321	\$ 5,120.46
4175	500	Ameren MO	98041275	\$ 112.42
4176	501	AT&T	November	\$ 103.55
4176	502	Republic	October/November	\$ 104.52
TOTAL				\$ 50,155.21

EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
4000	1065	GLW	Labor & Parts - Pista Grit Cart	\$ 997.75
TOTAL				\$ -

EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:

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



pneumatic and hydraulic equipment

www.jhf.com

REMIT TO: P.O. BOX 419161
Creve Coeur, MO 63141-9161

Ph (314) 427-0600
Fax (314) 427-3502

Invoice #	INV-00481561
Page	1 of 1
Invoice Date	10/29/2021

SOLD TO

Account #: C016283
Joint Sewer Board
c/o Alliance Water Resources
P.O. Box 1985
Lake Ozark, MO 65049

SHIP TO

C000462
Alliance Water Resources
#3 Anderson Road
P.O. Box #1985
Lake Ozark, MO 65049

Customer PO Number	Ship Date	Salesperson	Packing Slip #	Terms	Order Date
VERBAL GARY	10/29/2021	John Henry Foster	PS-00818411	Net 20 Days	10/21/2021
JHF Order #	Order Entered By	Placed By	Ship Via / Secondary Ship Via		
SO-00398606	Carla Ficke	Gary Hutchcraft	UPSG Bestway		

Part Number / Description	Ordered	Shipped	Backordered	Price Each	Extension
P4100000000-00760 PARKER ORIGA CYLINDER 760MM STROKE	4	4	0	773.20	3,092.80

REPLACEMENT W PER CYLINDERS
FOR THE UV

GL Acct#: 4020

Signature: [Signature]

Date: 11/8/21

Review and place orders at www.jhf.com !	Subtotal	Charges	Freight	Sales Tax	TOTAL
Subject to Terms and Conditions at http://www.jhf.com/terms_of_purchase.htm	3,092.80	0.00	90.18	0.00	3,182.98

Invoice



Martin Energy Group Services, LLC
PO BOX 729
Tipton, MO 65081
660-458-7000

Invoice Number: 0194877-INT
Invoice Date: 10/18/2021
Invoice Due Date: 11/2/2021
Order Number: 0160602
Order Date: 10/1/2020
Salesperson: Nelson Co blentz
Customer Number: JOISEW01

Sold To:

Joint Sewer Board
Lake of the Ozarks
Regional WWTP #1
PO Box 1985
Lake Ozark, MO 65049 United States

Confirm To:

Ship To:

Lake of the Ozarks
Regional WWTP #1
#3 Anderson Rd
Lake Ozark, MO 65049 United States

Customer P.O.	Ship VIA	F.O.B.	Terms Net 15 Days			
Item Code	Unit	Ordered	Shipped	Back Ordered	Price	Amount
/MPMBZ2	EA	1 00	1 00	0.00	369 0000	369.00
	PrevMaintAgree, 1 Gen, Plan B					
102584	EA	1 00	1 00	0.00	61.1500	61.15
	Oil filter LF9070					
108844	EA	1 00	1 00	0.00	86.2900	86.29
	Fuel Filter, FS1007					
778-DIESEL TREAT 191406	EA	2 00	2 00	0.00	13.5500	27.10
	Diesel Treat 1/2 gal. DOC oil					
784-OIL 15W40-GAL	GAL	24 00	24 00	0.00	14.2576	342.18
	Oil, 15W40 / Gal DOC Kleen-Tech CK4					
/MLABOR	HR	1.50	1 50	0.00	75.0000	112.50
	Labor Hourly Rate					
/MO PARTS	EA	1.00	1 00	0.00	25.0000	25.00
	Supplies					

Bi-ANNUAL SERVICE AGREEMENT
FOR STANDBY GENERATOR

GL Acct#: 4020

Signature: *[Handwritten Signature]*

Date: 10/22/21

Please Remit Payment To:

Martin Energy Group Services, LLC
PO BOX 729
Tipton, MO 65081

Sale in accordance with Martin Energy Group Services, LLC Conditions of Sale.
1.5% per month Finance Charges may apply on overdue invoices

Net Invoice	1 023.22
Less Discount	0.00
Freight:	0.00
Sales Tax	0.00
Invoice Total: (USD)	1 023.22
Canadian Dollars Total	

TYLER TRUESDELL
TRUESDELL FENCE
933 CRATER HILL ROAD
CAMDENTON, MO 65020

Invoice

DATE	INVOICE #
10/18/2021	562

BILL TO
Joint Sewer Board



DUE DATE	P.O. NUMBER
10/23/2021	

DESCRIPTION	QTY	RATE	AMOUNT
Replace and reset damaged and loose posts retie fence replace 1- brace rail and rail end and dome caps			3,400.00
CHAIN LINK FENCE REPAIR			
GL Acct#: <u>4020</u>			
Signature: <u>[Signature]</u>			
Date: <u>10/20/21</u>			
Thank you for your business!			
Subtotal			3,400.00
0% Tax			
Total			3,400.00



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680 1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3735

FOCUSED ENERGY. For life.

Account Number 4580005832
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD,
LAKE OZARK, MO 65049

AMOUNT DUE \$5,120.46

Due Date 11/30/2021

Current Detail for Statement 11/05/2021

Total Electric Charges \$5,120.46

Amount After Due Date \$5,197.27

Total Amount Due \$5,120.46

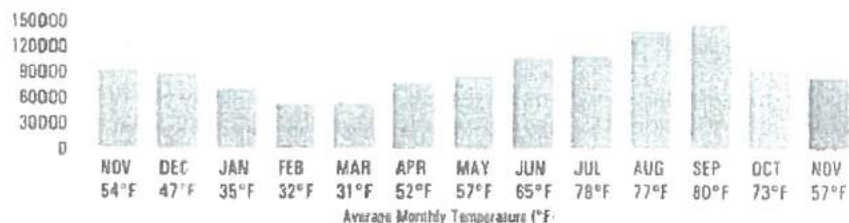
Previous Statement \$8,493.50

Total Payments \$8,493.50

Payment Received. Thank You.

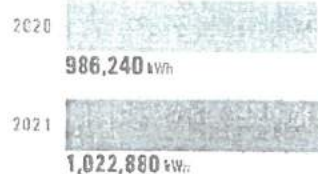
Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using 3.7% more than last year.



Usage from Jan-Nov for 2020 & 2021

Keeping You Informed.

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

GL Acct#: 4175

Signature: *[Signature]*

Date: 11/8/21

See next page for service details.

Keep this portion for your records.

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☐ Check if you have address changes on track.

>004226 6607936 0004 092139 10Z

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

Please return this portion with your payment

Amount Due	Due Date
\$5,120.46	November 30, 2021
Delinquent Amount After Due Date	Account Number
\$5,197.27	4580005832

Amount Enclosed \$

AMEREN MISSOURI
PO BOX 88068
CHICAGO IL 60680 1068

80600000 0045800058302 000005120460 000005120460



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 68068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For life.

Electric Service Details Service from 10/05/2021 - 11/03/2021 (29 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
11673321	10/05 - 11/03	29	Total kWh	Actual	70101.0000	69573.0000	528.0000	160.0000	84480.0000
11673321	10/05 - 11/03	29	Peak kW	Actual	0.9570	0.0000	0.9570	160.0000	153.1200

Usage Summary

Total kWh	84480.0000	Non-Summer kWh	84480.0000
Peak kW	153.1000	Billing Demand	153.1000
Total Billing Demand	153.1000	October Winter Base kW	162.4000
Winter Base Demand	153.1000	Base kWh Ratio	1.0000
Base kWh (HUD)	84480.0000	Seasonal kWh (HUD)	0.0000

Rate 3M Large General Service

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Seasonal Energy Charge	0.00	kWh	@ \$ 0.03560000	\$0.00
Summer Demand Charge	153.10	kW	@ \$ 0.00000000	\$0.00
Winter Demand Charge	153.10	kW	@ \$ 2.00000000	\$306.20
Energy Charge/Hours Used	0.00	kWh	@ \$ 0.09690000	\$0.00
Base Energy Charge / Hours Used	22,965.00	kWh	@ \$ 0.06090000	\$1,398.57
Base Energy Charge / Hours Used	30,620.00	kWh	@ \$ 0.04520000	\$1,384.02
Base Energy Charge / Hours Used	30,895.00	kWh	@ \$ 0.03560000	\$1,099.86
Customer Charge				\$95.29
Fuel Adjustment Charge	84,480.00	kWh	@ \$ 0.00414000	\$349.75
Energy Efficiency Investment Charge	84,480.00	kWh	@ \$ 0.00559200	\$472.41
Renewable Energy Adjustment	84,480.00	kWh	@ \$ 0.00017000	\$14.36
Total Service Amount				\$5,120.46
Total Electric Charges				\$5,120.46

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

Page 2 of 4

Address Changes or Corrections

Name _____
 Address _____
 City, State, Zip _____
 Phone Number _____

AmerenMissouri.com/WaysToPay

ONLINE e CHECK	PHONE 866.268.3729	IN PERSON FIND A PAY STATION AT AMERENMISSOURI.COM PAYSTATION
ONLINE CREDIT CARD	MAIL STUB & CHECK	



Pay by phone: 1.855.268.3729
 Pay by mail: PO Box 88068, Chicago, IL 60680-1068
 Pay online or manage your account: AmerenMissouri.com
 Customer Service: 1.877.426.3736

FOCUSED ENERGY. For life.

Account Number 5580005920
 Customer Name ALLIANCE WATER RESOURCES INC
 Service Address 3 ANDERSON RD
 LAKE OZARK, MO 65049

AMOUNT DUE \$112.42
Due Date 11/30/2021

Current Detail for Statement 11/05/2021

Total Electric Charges \$112.42

Amount After Due Date \$114.11

Total Amount Due \$112.42

Previous Statement \$257.74

Total Payments \$257.74

Payment Received, Thank You

Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using **91.7% more** than last year



Usage from Jan-Nov for 2020 & 2021

Keeping You Informed.

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: *Sam Hutchings*

Date: 11/8/21

See next page for service details

Keep this portion for your records.

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☐ Check if you have address changes on back.

Please return this portion with your payment

Amount Due	Due Date
\$112.42	November 30, 2021
Delinquent Amount After Due Date	Account Number
\$114.11	5580005920

Amount Enclosed \$

>004575 6607936 0004 092139 102

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

AMEREN MISSOURI
 PO BOX 88068
 CHICAGO IL 60680-1068

10633000 0055800059200 000000112420 000000112420



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 86068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For life.

Electric Service Details Service from 10/05/2021 - 11/03/2021 (29 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
88041275	10/05 - 11/03	29	Total kWh	Actual	23551.0000	23446.0000	105.0000	10.0000	1050.0000
88041275	10/05 - 11/03	29	Peak kW	Actual	4.5610	0.0000	4.5610	10.0000	45.6100

Usage Summary

Total kWh	1050.0000	Non-Summer kWh	1050.0000
Winter Base kWh	1830.0000	Current Base kWh	1050.0000
Winter Cur Base kWh	1050.0000	Seasonal kWh	0.0000

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

Threshold - Peak Demand

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Base Energy Charge	1,050.00	kWh	@ \$ 0.07790000	\$81.80
Seasonal Energy Charge	0.00	kWh	@ \$ 0.04490000	\$0.00
Customer Charge				\$19.99
Fuel Adjustment Charge	1,050.00	kWh	@ \$ 0.00414000	\$4.35
Energy Efficiency Investment Charge	1,050.00	kWh	@ \$ 0.00581100	\$6.10
Renewable Energy Adjustment	1,050.00	kWh	@ \$ 0.00017000	\$0.18
Total Service Amount				\$112.42
Total Electric Charges				\$112.42

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
October 27, 2021	\$257.74

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

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Address Changes or Corrections

Name _____
 Address _____
 City, State, Zip _____
 Phone Number _____

AmerenMissouri.com/WaysToPay

ONLINE BILL CHECK

PHONE
 866.268.3729

IN PERSON
 FIND A PAY STATION AT
AMERENMISSOURI.COM
 PAYS A BILL

ONLINE CREDIT CARD

MAIL
 STUB & CHECK

NAME <i>J. F. Smith, Pres.</i>					DATE <i>12/15/71</i>	
ADDRESS <i>1000 1st St.</i>					CUSTOMER ORDER NO.	
CITY <i>St. Louis, Mo.</i>			PHONE <i>434-5049</i>		TRUCK NO.	TERMS
MAKE	MODEL	YEAR	SER. NO.	LICENSE NO.	SPEEDOMETER	
			MTR. NO.			
OPER NO.	REPAIR ORDER INSTRUCTIONS					LABOR CHARGE
	<i>Repair Paint on Rear Box</i>					
	<i>Wheel Shaft + Worm Gear</i>					
	<i>Hydro Cable Brackets</i>					
	<i>Send Paint Filter Screens</i>					<i>910.00</i>
ES	<i>Make Angle Brackets for New Coat</i>					
	<i>Paint Coat with 2 part Epoxy</i>					

~~Signature:~~

Date: 10/15/21

I hereby authorize the above repair work to be done along with the necessary material, and hereby grant you and/or your employees permission to operate the car or truck herein described on streets, highways or elsewhere for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above car or truck to secure the amount of repairs thereto.

F.S. PHONE WHEN READY YES ☐ NO ☐

TOTAL LABOR	910.00
-------------	--------

TOTAL PARTS	67	75
-------------	----	----

MACHINE EARNINGS	20	00
------------------	----	----

OIL & GREASE		
--------------	--	--

Freight		
---------	--	--

TAX		
-----	--	--

TOTAL	200
-------	-----

TOTAL AMOUNT	997.75
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[illegible]

ADDITIONAL PARTS SEE LIST ON BACK →

PARTS TOTAL →

OUTSIDE WORK

PRICE

NOT RESPONSIBLE FOR LOSS OR DAMAGE TO CARS OR ARTICLES LEFT IN CARS IN CASE OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND OUR CONTROL.

OIL AND GREASE

PRICE

GEAR LUBE

QTS. OIL ®

LBS. GREASE ●

TOTAL OIL AND GREASE

OUTSIDE WORK TOTAL →

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

Account Number	Account Name	10/31/2021					Percent YTD
		2019 Actual	2020 Actual	2021 Budget	2021 Actual as of 10/31/2021	2021 Oct. Revenue	
3020	Osage Beach	475,091.53	475,836.10	473,000.00	387,389.91	39,062.37	82%
3010	Lake Ozark	74,908.46	74,163.90	77,000.00	70,943.41	6,770.96	92%
3030	Misc.	0.00	4,500.00	0.00	0.00	0.00	0%
3100	Interest	4,286.79	4,019.49	2,000.00	2,508.72	243.41	125%
3060	Waste Haulers' Fee	26,260.00	39,320.00	36,000.00	54,720.00	10,320.00	152%
Total Operating Fund		580,546.78	597,839.49	588,000.00	515,562.04	56,396.74	88%
E/R Fund Income		9,001.77	8,955.85	6,000.00	4,650.88	191.18	78%
TOTAL INCOME		589,548.55	606,795.34	594,000.00	520,212.92	56,587.92	88%

MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
10/31/2021

Account Number	Account Name	2019 Actual	2020 Actual	2021 Budget	2021 Actual as of 10/31/2021	2021 Oct. Expenses	Percent YTD
4000	Equipment Replace Fund	41,604.00	71,604.00	121,606.00	101,340.00	10,134.00	83%
4020	*Maintenance & Repair	104,062.97	26,299.39	111,800.00	85,113.35	563.37	76%
4140	Insurance	16,761.00	19,865.00	19,200.00	21,493.00	0.00	112%
4150	Vehicle Repair/Main	5,479.60	12,479.74	11,500.00	10,635.31	0.00	92%
4170	Contract Management	299,592.00	305,560.00	314,752.00	257,200.00	25,720.00	82%
4175	Electric	73,276.87	75,077.36	81,500.00	74,646.13	8,751.24	92%
4176	Utilities Misc.	3,717.52	2,485.59	3,500.00	3,160.83	156.85	90%
4190	Bank Charges	176.00	32.60	0.00	0.00	0.00	0%
4200	Audit	2,400.00	2,646.50	2,600.00	2,600.00	0.00	100%
4240	Capital Purchases	145,247.00	0.00	500.00	0.00	0.00	0%
	Totals	694,316.96	516,072.18	666,958.00	556,188.62	45,325.56	83%
	**E/R Expenses	41,280.51	85,258.27	221,000.00	202,161.70	2,673.46	91%
	TOTAL EXPENSES	735,597.47	601,330.45	887,958.00	758,350.32	47,999.02	85%

2020 CARRY

*Maintenance & Repair

**Equipment & Replacement

Accounting - QuickBooks	300.00	Replace Pista Grit Cart w/machine work	3,000.00	X
Auto Dialer Yrly Software Fee	500.00	Replace wooden doors w/fiberglass	2,000.00	
Regular Maintenance	15,000.00	Rebuild 3 RAS pumps	10,000.00	
UV Spare Parts	10,000.00	Replace lawn mower	6,000.00	X
Ducking skimmer arm Elec repair	5,000.00	Sludge Truck	200,000.00	X
Rock for Road	2,000.00	6,758.00 FINAL - Parking Lot Lights	-	
Chain-link fence repair	4,000.00		-	
Sandblast & paint clarifier #2		68,400.00	-	
	<u>36,800.00</u>		<u>221,000.00</u>	

OPERATING FUND INCOME AND EXPENSE SUMMARY
10/31/2021

Beginning Balance	297,781.99
Income - Osage Beach	39,062.37
Income - Lake Ozark	6,770.96
Income - Other	-
Income - Waste Haulers' Fees	3,160.00
Interest - Checking	1.46
Income - CD Interest	241.95
Transfers From E/R Fund	-
Transfers to E/R Fund	(10,134.00)
Expenses	(35,191.56)
Ending Fund Balance	301,693.17
Central Bank - NOW Acct.	81,604.75
	-
CD First Bank of the Lake, 11/20/21 #101318432	106,915.65
CD First Bank of the Lake, 7/22/22 #101318433	113,172.77
	-
Outstanding Checks:	-
	301,693.17

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
10/31/2021

Beginning Balance	428,600.18
Interest - Checking	12.03
Income - CD Interest	179.15
Transfers to E/R Fund	10,134.00
Income - Miscellaneous	-
Expenses	(2,673.46)
Ending Fund Balance	436,251.90
First Bank of the Lake - Money Mkt.	56,725.39
CD First Bank of the Lake, 7/30/21 #101318430	109,526.51
CD First Bank of the Lake, 11/07/21 #101318434	270,000.00
	-
	-
Outstanding Checks:	-
	436,251.90

**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 2021

Submitted by Alliance Water Resources, Inc. for the

November 2021

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	1.7	2.5	N/A	10.0		0.05	
Peak Day	2.4	3.6	7.8	< 20.0		0.08	
Percent Removal	99.0	99.0	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 1.255 MGD or 42% of Permitted flow with Lake Ozark contributing 15% of the total flow and Osage Beach contributing 85%. 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 55105 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 17 tanker loads of bio-solids during the month equivalent to a total of 61,200 gallons and 22,698 pounds dry weight solids.

397,818 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 337,500 gallons with a level of 3.5 feet in Tank 1 and 4.0 feet in Tank 2.

WASTEHAULERS

The plant received 34 loads of septage during the month totaling 80,000 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 came in on the 4th of October and found the UV system was not operating properly and troubleshoot it and found that the sensitivity sensor was bad but was able to bypass that through another relay that got us back operating normal.
- The fence repair company was here on the 7th through the 15th of October replacing the bad post. We did a final inspection of there work and had a punch list and they came back and completed that on the 22nd and everything looks good now.
- We had a couple flats on the sludge truck with the 1st one on the 22nd of October which was a nail and again on the 26th which was a screw, both were patchable and got us back going.

SAFETY

- We conducted our monthly Safety Meeting on Working Alone Safety & Crane Safety on the 13th of October.

REGULATORY AGENCY, INSPECTION AND REPORTS

- We filled out the new EDMR on the EPA MoGEM website on the 8th of November.

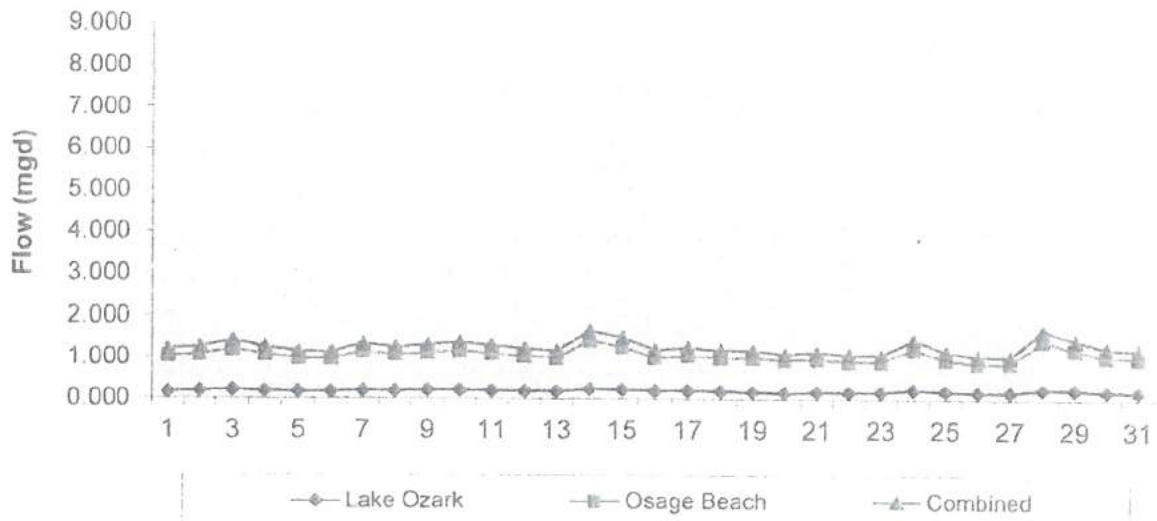
MISCELLANEOUS AND RECOMMENDATIONS

TABLE A
LAKE OZARK/OSAGE BEACH WWTP

MONTH OF October 2021

DATE		FLOW					BOD 5 MG/L			TSS MG/L		
	RAIN FALL IN.	LO mgd	OB mgd	COMB mgd	% LO	% OB	LO mg/l	OB mg/l	COMB mg/l	LO mg/l	OB mg/l	COMB mg/l
1-Oct	0	0.165	1.035	1.200	13.8	86.3	260	138	153	222	174	220
2-Oct	0.4	0.195	1.067	1.262	15.5	84.5						
3-Oct	0.5	0.217	1.194	1.411	15.4	84.6						
4-Oct	0	0.183	1.077	1.260	14.5	85.5						
5-Oct	0	0.171	0.974	1.145	14.9	85.1						
6-Oct	0	0.168	0.966	1.134	14.8	85.2						
7-Oct	0.7	0.202	1.138	1.340	15.1	84.9						
8-Oct	0	0.185	1.060	1.245	14.9	85.1	193	165	138	136	280	224
9-Oct	0	0.206	1.104	1.310	15.7	84.3						
10-Oct	0	0.206	1.162	1.368	15.1	84.9						
11-Oct	0.3	0.197	1.098	1.295	15.2	84.8						
12-Oct	0.2	0.185	1.029	1.214	15.2	84.8						
13-Oct	0	0.176	0.987	1.163	15.1	84.9						
14-Oct	1.5	0.239	1.405	1.644	14.5	85.5	253	135	175	278	152	228
15-Oct	0	0.222	1.267	1.489	14.9	85.1						
16-Oct	0	0.189	0.995	1.184	16.0	84.0						
17-Oct	0	0.201	1.039	1.240	16.2	83.8						
18-Oct	0	0.186	0.989	1.175	15.8	84.2						
19-Oct	0	0.174	0.996	1.170	14.9	85.1						
20-Oct	0	0.147	0.953	1.100	13.4	86.6						
21-Oct	0	0.174	0.969	1.143	15.2	84.8						
22-Oct	0	0.168	0.908	1.076	15.6	84.4	230	208	228	200	270	368
23-Oct	0	0.171	0.908	1.079	15.8	84.2						
24-Oct	0.7	0.230	1.209	1.439	16.0	84.0						
25-Oct	0.1	0.195	0.961	1.156	16.9	83.1						
26-Oct	0	0.174	0.863	1.037	16.8	83.2						
27-Oct	0	0.168	0.877	1.045	16.1	83.9						
28-Oct	1.3	0.251	1.425	1.676	15.0	85.0						
29-Oct	0.2	0.243	1.205	1.448	16.8	83.2	243	198	155	250	330	246
30-Oct	0	0.207	1.048	1.255	16.5	83.5						
31-Oct	0	0.192	1.017	1.209	15.9	84.1						
SUM	6.0	5.987	32.925	38.912								
AVG		0.193	1.062	1.255	15	85	236	169	170	217	241	257
NOTE: BOLD PRINT INDICATES WEEKEND DAYS												

Daily Flow
Figure 1



Effect of Rainfall on Flow
Figure 2

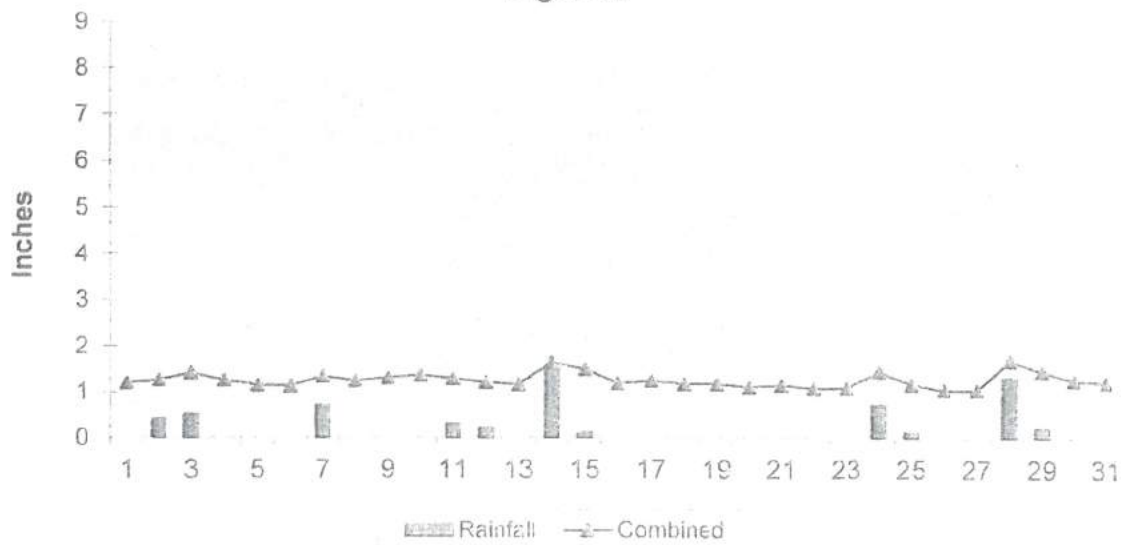


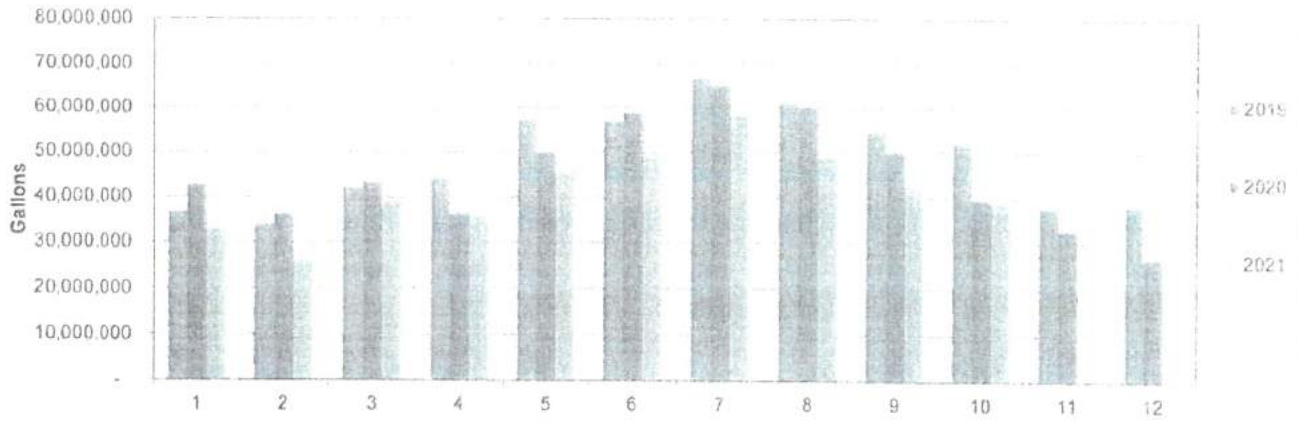
TABLE B
JOINT SEWER BOARD
Monthly Flows

<u>2019</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	2.1	32,085,000	87%	4,708,000	13%	36,793,000	100%
February	4.4	29,492,000	86%	4,650,000	14%	34,142,000	100%
March	6.3	36,210,000	86%	5,876,000	14%	42,086,000	100%
April	4.1	37,991,000	86%	6,135,000	14%	44,126,000	100%
May	9.9	49,124,000	85%	8,333,000	15%	57,457,000	100%
June	6.0	49,051,000	86%	7,864,000	14%	56,915,000	100%
July	4.8	57,666,000	86%	9,132,000	14%	66,798,000	100%
August	6.0	53,074,000	87%	8,215,000	13%	61,289,000	100%
September	3.5	47,732,000	87%	7,165,000	13%	54,897,000	100%
October	11.1	44,971,000	86%	7,194,000	14%	52,165,000	100%
November	3.5	33,141,000	87%	4,779,000	13%	37,920,000	100%
December	1.8	33,575,000	88%	4,708,000	12%	38,283,000	100%
	63.2	504,112,000	86%	78,759,000	13%	582,871,000	100%

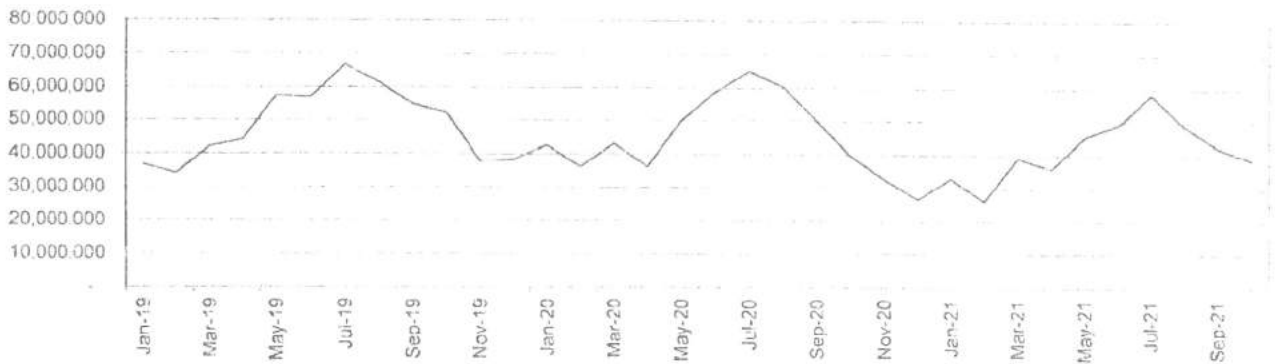
<u>2020</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	7.7	36,806,000	86%	5,780,000	14%	42,586,000	100%
February	3.6	31,279,000	86%	4,986,000	14%	36,265,000	100%
March	6.1	37,286,000	86%	5,888,000	14%	43,174,000	100%
April	5.2	31,967,000	88%	4,324,000	12%	36,291,000	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%

<u>2021</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
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							
December							
	49.1	353,108,000	85%	64,518,000	15%	417,626,000	100%

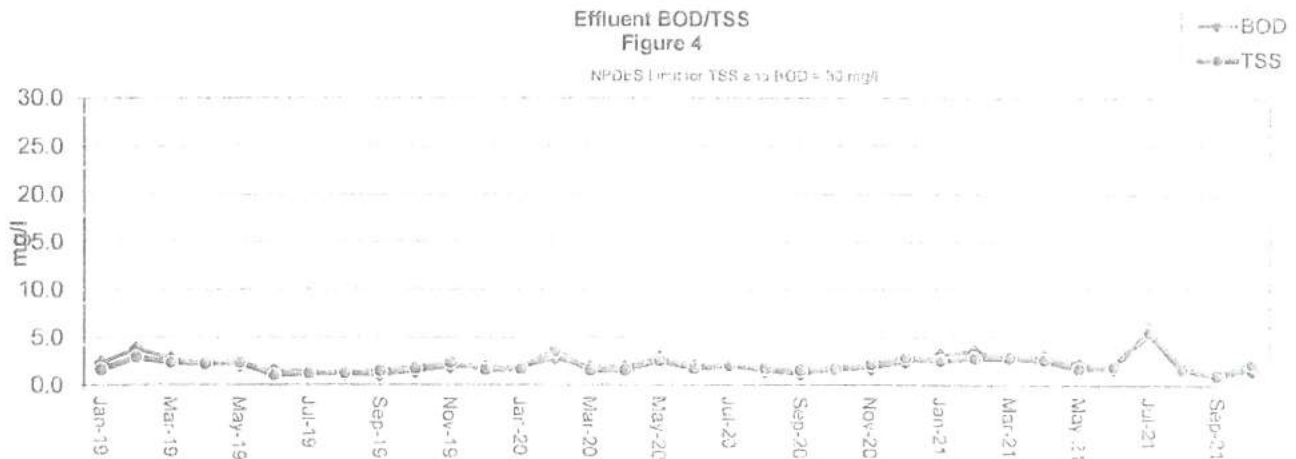
Monthly Influent Flow
Figure 3A



Monthly Influent Flow
Figure 3B



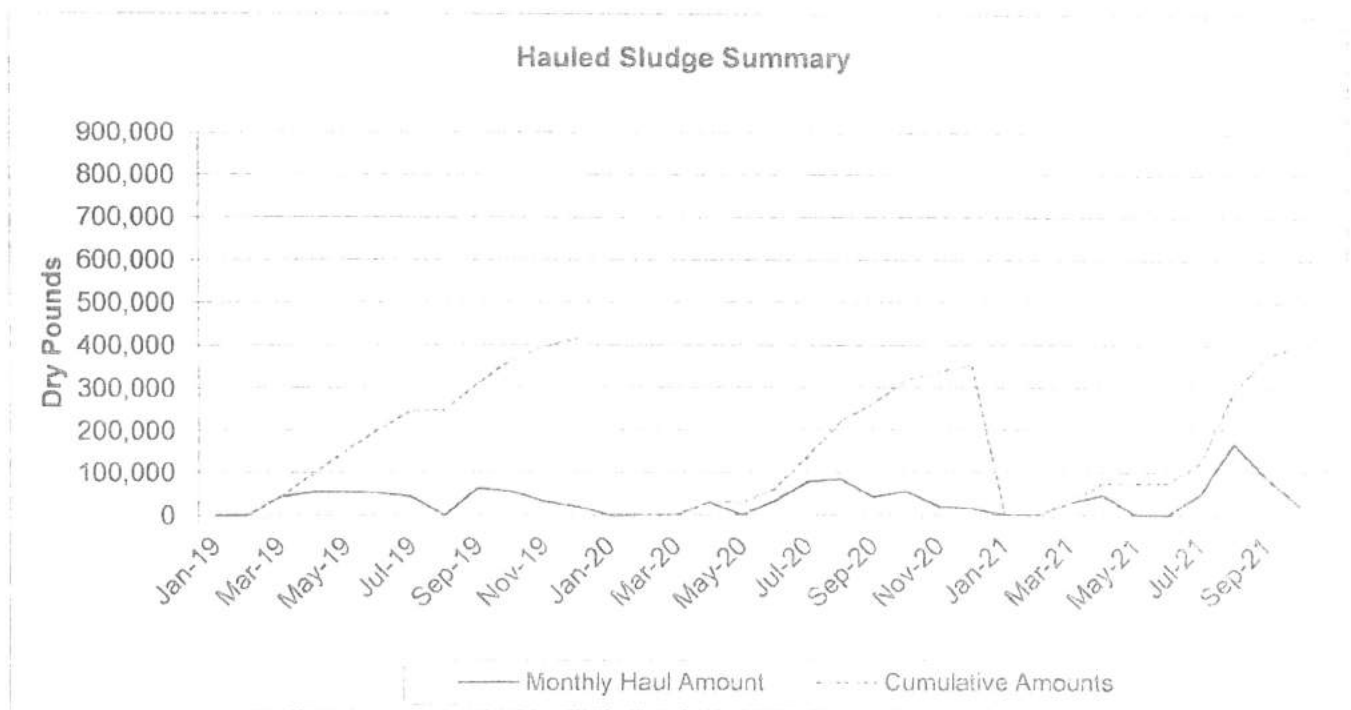
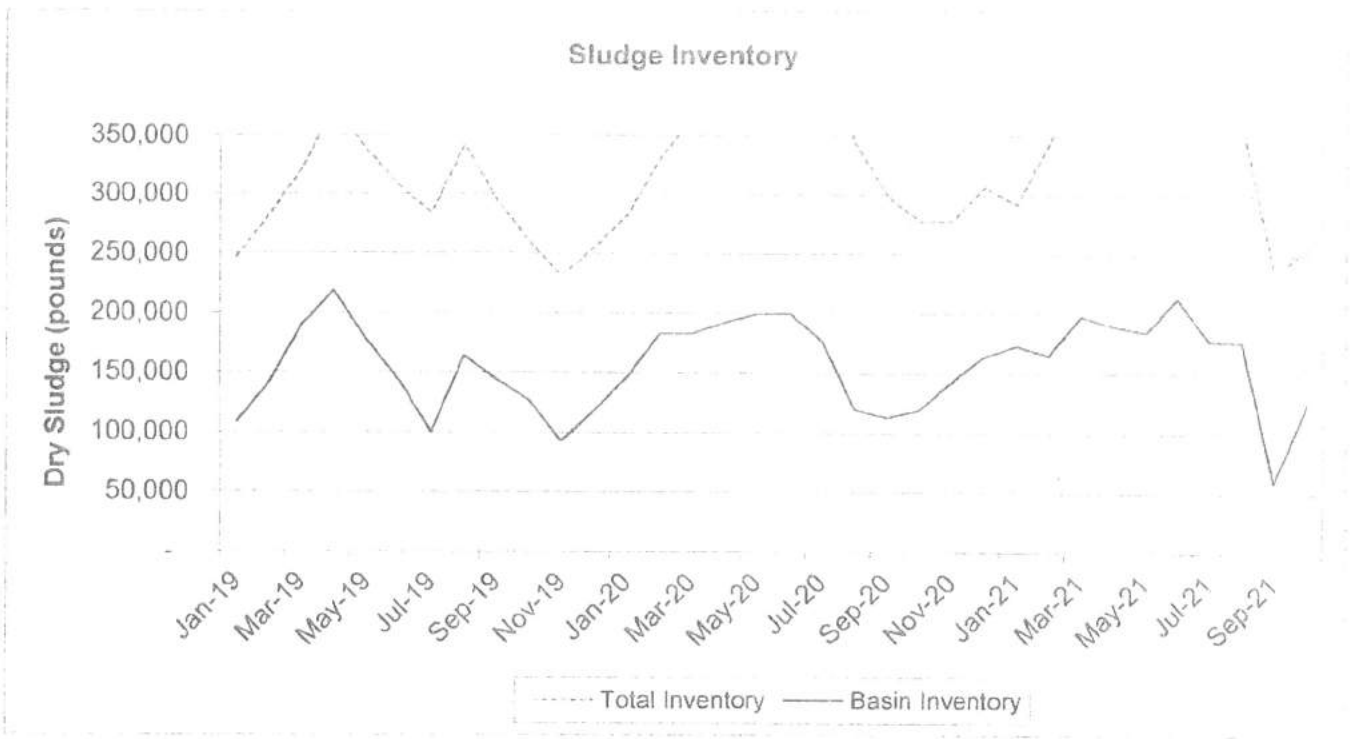
Effluent BOD/TSS
Figure 4



	Loads	Thickened Sludge			Annual Cumulative # Dry
		Gallons	# Dry	% Solids	
Jan-19	0	-	0	3.4%	
Feb-19	0	-	0	3.4%	
Mar-19	39	133,200	43,138	3.9%	43,138
Apr-19	39	144,000	53,840	4.0%	97,079
May-19	49	181,200	54,805	3.6%	151,945
Jun-19	44	162,800	51,872	3.8%	203,817
Jul-19	37	136,900	43,633	3.8%	247,450
Aug-19	0	-	0	3.8%	247,450
Sep-19	58	214,800	62,487	3.5%	309,937
Oct-19	50	182,000	51,742	3.5%	364,979
Nov-19	20	107,300	31,629	3.5%	395,308
Dec-19	17	62,900	20,642	3.8%	415,951
Jan-20	0	-	0	3.8%	
Feb-20	0	-	0	3.9%	
Mar-20	0	-	0	3.9%	
Apr-20	21	92,000	23,315	3.8%	29,315
May-20	0	-	0	3.8%	29,315
Jun-20	25	92,000	21,600	4.1%	50,975
Jul-20	59	255,300	77,258	3.6%	138,243
Aug-20	70	281,200	83,285	2.6%	221,529
Sep-20	19	140,000	41,627	3.5%	263,156
Oct-20	25	158,600	50,298	4.0%	313,454
Nov-20	18	86,600	26,256	3.5%	337,709
Dec-20	11	40,700	14,843	4.4%	352,552
Jan-21	0	-	0	4.4%	
Feb-21	0	-	0	4.4%	
Mar-21	29	85,100	26,891	4.1%	29,892
Apr-21	39	144,000	40,205	3.8%	74,152
May-21	0	-	0	3.8%	74,152
Jun-21	0	-	0	3.8%	74,152
Jul-21	20	144,000	40,378	3.9%	121,530
Aug-21	53	160,000	161,008	3.0%	287,893
Sep-21	20	73,200	80,220	3.2%	375,119
Oct-21	11	51,200	22,089	4.4%	397,817

Basin Depths				# Dry
Tank #1	Tank #2	AB #1	Basin Gallons	
5.0	3.5	0.0	382 500	108 482
6.0	5.0	0.0	495 000	140 352
6.0	7.0	0.0	585 000	189 482
5.5	7.5	0.0	585 000	218 676
8.0	5.0	0.0	585 000	177 036
7.0	3.0	0.0	450 000	143 391
3.0	4.0	0.0	315 000	103 397
5.5	5.0	0.0	517 500	164 006
7.0	4.0	0.0	495 000	144 134
7.5	2.0	0.0	427 500	126 498
3.5	3.5	0.0	315 000	92 853
5.0	2.0	0.0	350 000	118 148
5.0	4.0	0.0	450 000	146 357
6.5	6.0	0.0	562 500	182 959
5.5	7.0	0.0	592 500	182 959
6.0	7.5	0.0	607 500	192 528
6.0	8.0	0.0	630 000	199 650
6.0	7.0	0.0	585 000	202 228
6.0	7.0	0.0	585 000	177 054
5.0	4.0	0.0	405 000	119 953
4.0	4.5	0.0	382 500	113 246
5.0	3.0	0.0	350 000	119 563
5.0	5.0	0.0	495 000	143 111
4.5	5.5	0.0	450 000	164 112
7.0	3.5	0.0	472 500	173 389
5.0	5.0	0.0	450 000	165 132
6.0	7.0	0.0	585 000	198 549
6.0	7.5	0.0	607 500	199 582
6.0	7.0	0.0	585 000	185 398
7.0	8.0	0.0	675 000	213 921
5.0	7.0	0.0	540 000	177 668
7.0	5.0	0.0	585 000	176 693
2.0	3.0	0.0	225 000	69 257
3.5	4.0	0.0	337 500	125 173

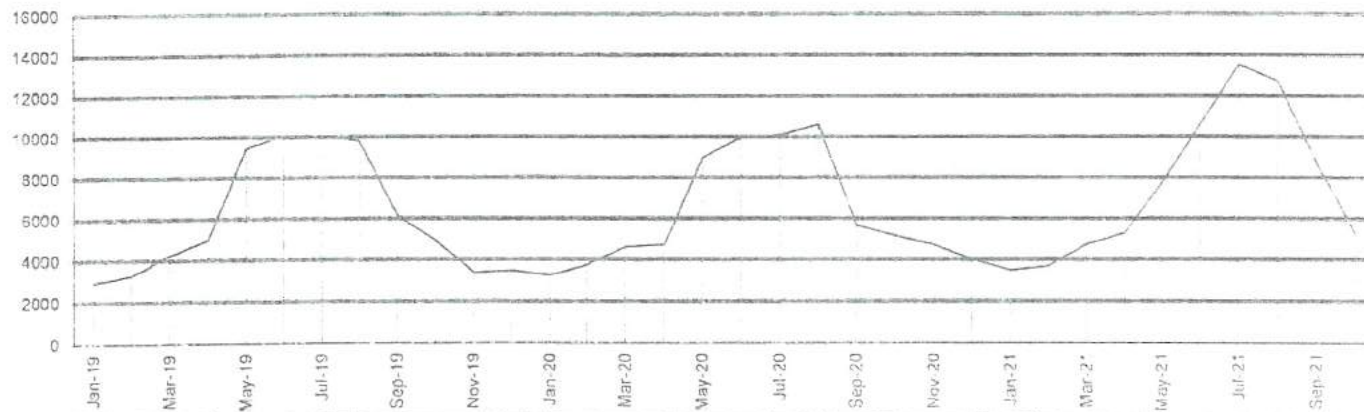
Blanket Depths			MLSS Inventory		Blanket and MLSS Inventory		MLSS		Total Dry	Accepted Solids	
Clarf #1	Clarf #2	Clarf #3	MLSS AB #1	MLSS AB #2	Gallons	# Dry	% Solids	Sludge Inventory		Loads	Gallons
1.0	1.0	0.0	4,650	4,480	3,635,524	138,412	0.00457	246,874		19	46,600
1.0	1.0	0.0	4,570	4,740	3,635,524	141,141	0.00456	281,530		31	79,500
0.5	1.0	0.0	4,780	3,920	3,626,643	131,571	0.00435	321,033		9	21,500
1.5	0.5	1.0	5,720	4,530	3,678,952	157,248	0.00513	375,923		23	61,500
3.0	1.5	1.0	5,150	5,160	3,723,357	160,377	0.00515	337,113		12	25,500
2.0	4.0	1.5	5,610	4,810	3,771,714	163,589	0.00521	307,257		19	47,500
2.0	3.0	0.5	6,060	5,830	3,710,524	183,373	0.00595	284,370		35	84,000
5.0	3.0	0.5	5,660	5,680	3,763,810	177,362	0.00557	341,980		20	72,500
2.0	1.0	1.0	4,400	5,310	3,696,714	150,607	0.00480	294,741		20	55,000
2.5	3.0	1.0	4,170	4,350	3,741,119	132,910	0.00426	259,414		40	97,000
3.5	5.0	0.0	4,980	3,850	3,750,977	138,115	0.00442	230,908		15	38,000
1.0	1.0	0.0	5,080	3,940	3,635,524	136,955	0.00452	255,044		14	32,000
1.0	1.5	0.0	4,260	4,690	3,644,405	135,015	0.00448	282,382		15	34,100
3.5	2.0	0.0	5,180	4,380	3,697,691	147,718	0.00479	330,676		20	57,000
1.0	5.0	1.0	5,700	5,940	3,767,762	183,825	0.00585	303,184		25	64,000
1.0	1.0	1.0	5,740	5,290	3,678,952	169,214	0.00552	261,742		39	107,000
1.0	7.0	1.0	6,010	6,110	3,785,524	191,222	0.00605	360,381		35	83,000
6.0	7.0	0.5	7,050	7,120	3,852,620	227,447	0.00709	427,875		6	18,000
7.0	7.0	1.0	6,890	7,360	3,892,096	231,693	0.00714	405,656		88	208,000
6.0	5.0	1.0	6,530	7,400	3,859,572	224,921	0.00697	340,914		67	158,000
1.0	1.0	0.5	6,000	6,200	3,657,228	185,058	0.0061	299,304		46	104,000
1.0	1.0	1.0	4,980	5,070	3,678,952	158,015	0.00515	277,578		10	32,000
1.0	0.0	0.5	4,780	4,080	3,639,476	134,485	0.00443	277,576		15	35,000
1.0	0.0	0.5	5,020	4,360	3,639,476	142,508	0.00447	203,620		32	69,000
6.0	0.0	1.0	3,810	3,780	3,750,000	119,689	0.0038	252,077		82	200,000
5.0	8.0	0.0	5,490	5,750	3,830,905	179,558	0.00562	244,693		20	59,500
2.0	5.0	0.5	6,830	6,330	3,746,048	205,572	0.00558	404,127		32	70,000
12.0	5.0	1.0	6,890	5,350	3,945,382	201,375	0.00512	391,957		22	52,000
13.0	14.0	1.0	6,200	6,330	4,123,002	215,427	0.00627	400,025		45	128,500
0.0	1.5	2.0	7,260	8,050	3,926,643	234,903	0.00717	448,924		63	161,500
7.0	12.0	3.0	9,190	8,110	4,057,762	279,340	0.00823	457,007		111	288,000
1.0	1.0	0.5	5,840	5,657	3,657,238	183,008	0.0060	359,701		65	163,000
1.0	1.0	0.5	5,320	6,180	3,657,238	175,362	0.0058	234,640		60	150,000
1.0	0.5	0.5	4,430	4,140	3,648,357	130,281	0.0043	255,554		26	60,000



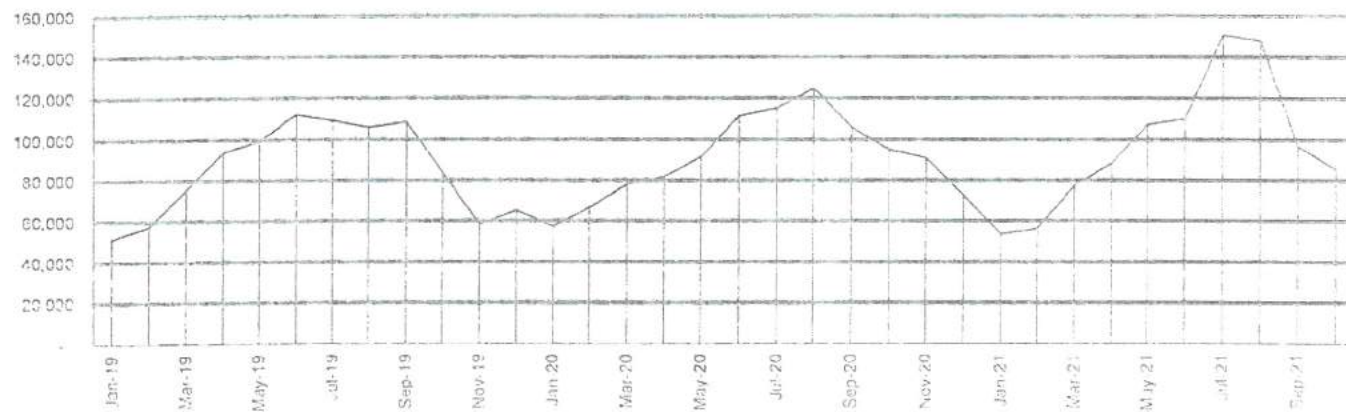
Electric Cost Kilowatts Used

Jan-19	2926	51,490
Feb-19	3295	57,450
Mar-19	4251	75,830
Apr-19	5014	93,570
May-19	9452	99,330
Jun-19	10074	112,400
Jul-19	10066	109,190
Aug-19	9784	106,020
Sep-19	6115	108,680
Oct-19	4920	83,790
Nov-19	3390	58,410
Dec-19	3482	65,660
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	111,680
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

Electric Cost



Kilowatts Used





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

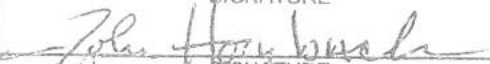
NAME OF FACILITY							LOCATION ADDRESS & CITY							COUNTY/REGION		
Lake of the Ozarks Regional WWTP #1							#3 Anderson Road							Miller/SWRO		
MONTH/YEAR		PERMIT NUMBER					OUTFALL NUMBER		TYPE TREATMENT FACILITY							
Oct-21		MO-0103241					#001		Oxidation Ditch/UV/Sludge Holding-sludge is land 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	153	220		23.4	1.608	7.4	0.7	0.8		8.2		22.8	99.5	99.6	
2	7.3				22.8	1.601	7.5				8.2		22.6			
3	7.1				22.9	1.879	7.5				8.2		22.5			
4	7.1				21.1	1.669	7.5				8.4	< 20	21.7			
5	7.1				21.2	1.630	7.4				8.6		21.2			
6	7.1			29.3	22.3	1.608	7.4			0.03	8.5		21.4			
7	7.0				22.2	1.653	7.4				8.5		21.4			
8	7.1	138	224		22.5	1.729	7.5	1.5	2.3		8.4		21.6	98.9	99.0	
9	7.3				21.3	1.683	7.6				8.4		20.7			
10	7.3				21.3	1.809	7.6				8.4		20.7			
11	7.3				21.7	1.724	7.5				8.3	< 20	21.6			
12	7.0				21.6	1.680	7.4				8.6		20.7			
13	6.9			35.2	22.1	1.600	7.4			0.06	8.4		21.2			
14	7.0	175	228		21.8	2.164	7.3	2.0	3.6		8.5		20.7	98.9	98.4	
15	7.1				20.8	1.848	7.6				8.5		20.2			
16	7.1				20.2	1.639	7.4				8.5		18.5			
17	7.0				19.7	1.709	7.3				8.6		18.1			
18	7.0				19.5	1.625	7.8				9.2	< 20	18.2			
19	7.3				18.2	1.485	7.6				9.1		16.3			
20	6.9			48.7	20.7	1.585	7.4			0.04	9.1		18.4			
21	7.3				15.9	1.689	7.6				9.2		15.3			
22	7.2	228	368		18.2	1.621	7.5	1.7	2.5		8.9		17.1	99.3	99.3	
23	7.2				17.5	1.156	7.5				9.0		16.4			
24	7.2				19.3	1.876	7.5				9.2		17.8			
25	7.4				17.5	1.585	7.8				9.2	< 20	16.8			
26	7.3				15.7	1.478	7.6				9.3		15.7			
27	7.1			36.5	18.9	1.522	7.5			0.08	9.2		17.2			
28	7.0				18.5	2.182	7.3				9.1		17.2			
29	6.9	155	246		18.2	2.048	7.4	2.4	3.4		9.3		16.3	98.5	98.6	
30	6.9				18.7	1.791	7.3				9.1		16.4			
31	7.0				17.8	1.728	7.3				9.2		15.8			
Total						52.604										
Avg		170	257	37	20	1.697		1.7	2.5	0.05	8.6	10.0	19.1	99.0	99.0	
Min	6.9	138	220	29	16	1.156	7.3	0.7	0.8	0.03	8.2	< 20	15.3	98.5	98.4	
Max	7.4	228	368	49	23	2.182	7.8	2.4	3.6	0.08	9.3	< 20	22.8	99.5	99.6	

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 ug/L	Selenium ug/l	Hardness mg/L	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/l
1										
2										
3										
4										
5										
6	3.8	4.7	37.3	< 4.8	< 5.0	< 1.0	398	5.7	46.6	< 0.10
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Total	3.8	4.7	37.3	< 4.8	< 5.0	< 1.0	398	5.7	46.6	< 0.10
Avg	3.8	4.7	37.3	< 4.8	< 5.0	< 1.0	398	5.7	46.6	< 0.10
Min	3.8	4.7	37.3	< 4.8	< 5.0	< 1.0	398	5.7	46.6	< 0.10
Max	3.8	4.7	37.3	< 4.8	< 5.0	< 1.0	398	5.7	46.6	< 0.10

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

GENERAL 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				Outside	*RAIN inches	Time
		* DO	** MLSS	*Settleability		* DO	** MLSS	*Settleability		* Ambient		
		mg/l	mg/l	*30 min ml	Temp ° C	mg/l	mg/l	*30 min ml	Temp ° C	Temp ° F		
1		1.8	5,050	710	22.6	2.3	6,120	760	22.6	66	0	7:30
2		2.6	6,380	680	22.5	2.9	5,630	720	22.5	68	0.4	7:30
3		2.7	5,700	660	22.5	2.7	5,750	710	22.6	67	0.5	7:30
4		1.5	5,640	630	21.3	2.1	5,900	690	21.3	60	0	7:30
5	6,906	2.1	5,340	640	20.8	2.4	4,790	660	20.9	56	0	7:30
6		2.1	6,090	680	21.0	2.8	5,700	580	21.1	64	0	7:30
7		2.0	4,710	560	21.2	2.1	5,250	600	21.3	63	0.7	7:30
8		2.3	5,740	500	21.6	1.8	4,800	550	21.5	60	0	7:30
9		3.3	5,550	560	21.1	2.8	4,990	510	21.3	64	0	7:30
10		2.1	5,420	500	21.2	3.0	5,650	550	21.4	64	0	7:30
11		1.3	5,690	530	21.7	2.3	5,150	460	21.6	68	0.3	7:30
12		2.3	3,130	540	20.1	3.0	4,760	540	20.3	52	0.2	7:30
13		2.8	5,340	480	20.9	3.1	5,540	500	20.9	66	0	7:30
14		1.7	3,470	410	20.8	2.0	5,730	510	20.9	63	1.5	7:30
15		3.2	4,800	420	20.8	3.4	4,990	470	20.8	65	0.1	7:30
16		4.2	3,610	440	18.5	4.2	5,550	540	18.7	45	0	7:30
17		4.7	4,940	410	17.5	4.4	5,180	580	18.0	44	0	7:30
18		4.2	4,730	460	17.3	2.8	5,230	610	17.6	47	0	7:30
19		4.4	5,440	600	17.4	3.4	4,290	400	18.0	50	0	7:30
20	6,906	3.7	5,760	720	17.8	3.9	3,710	320	18.2	54	0	7:30
21	2,642	1.6	6,080	730	16.9	3.4	3,690	330	17.1	50	0	7:30
22	3,783	3.4	5,060	500	17.4	4.4	4,540	450	17.6	46	0	7:30
23		5.5	4,540	430	16.9	5.5	4,700	530	17.1	52	0	7:30
24		5.0	4,550	430	18.2	4.2	4,790	540	18.7	62	0.7	7:30
25		4.0	4,380	440	17.4	3.2	4,820	530	17.9	52	0.1	7:30
26		4.4	4,680	480	16.4	4.2	4,870	560	16.9	45	0	7:30
27	5,404	4.1	4,260	440	17.6	3.9	4,250	430	17.9	56	0	7:30
28		2.1	5,250	650	16.8	2.9	4,080	580	16.9	51	1.3	7:30
29		4.3	4,970	700	16.3	4.6	4,680	530	16.5	50	0.2	7:30
30		3.7	5,400	670	16.5	5.1	4,360	550	16.5	50	0	7:30
31		4.1	4,430	680	15.7	5.1	4,140	580	15.9	48	0	7:30

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback		(573)365-0455	11/8/2021
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft		(573)365-0455	11/8/2021

*Required Daily (Monday / Friday)

**Required 1/week

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

Permit Number	Outfall Number
MO0103241	601M
Monitoring Period	
10/1/21	10/31/21
NODD: 02801	

Parameters	Reporting Requirements			Unit	Reporting Requirements		Unit
Flow, in conduit or thru treatment plant	2.182	1697	1697	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	2.4	1.7	mg/l				
Mon. Location.: End of Pipe	Weekly Avg.:45	Monthly Avg.:30					
Sample Type: 24 Hour Composite							
Frequency: Weekly							
Total Suspended Solids (TSS)	3.6	2.5	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	10.0	#/100ml				
Mon. Location.: End of Pipe	7 Day Geo.:630	30 Day Geo. Mean:126					
Sample Type: Grab							
Frequency: Weekly							
Phosphorus, total (as P)	3.8	3.8	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)	4.7	4.7	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)	37.3	37.3	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	0.08	0.08	mg/l				

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

N)							
Mon. Location: End of Pipe	Daily Max.:12.1	*****	Monthly Avg.:2.5	*****	*****	*****	*****
Sample Type: 24 Hour Composite							
Frequency: Weekly							
pH	7.3	*****	7.8	SU	*****	*****	*****
Mon. Location: End of Pipe	Minimum:6.0	*****	Maximum:9.0	*****	*****	*****	*****
Sample Type: Grab							
Frequency: Weekly							
BOD, 5-day, percent removal	*****	*****	98.5	0%	*****	*****	*****
Mon. Location: End of Pipe	*****	*****	Monthly Avg.	*****	*****	*****	*****
			Min.:85				
Sample Type: Calculated							
Frequency: Monthly							
Suspended Solids, percent removal	*****	*****	98.4	0%	*****	*****	*****
Mon. Location: End of Pipe	*****	*****	Monthly Avg.	*****	*****	*****	*****
			Min.:85				
Sample Type: Calculated							
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

Permit Number	Outfall Number
MO0103244	ENH1M
Monitoring Period	
10-1-21	10-31-21
NODE: 02304	

Parameters	Reporting Requirements			Unit	Reporting Requirements			Unit
BOD, 5-day, 20 deg. C	*****	*****	170	mg/l	*****	*****	*****	
Mon. Location.: Influent	*****	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite			Avg.: Monitoring					
Frequency: Monthly			Required					
Total Suspended Solids (TSS)	*****	*****	257	mg/l	*****	*****	*****	
Mon. Location.: Influent	*****	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite			Avg.: Monitoring					
Frequency: Monthly			Required					
Nitrogen, ammonia total (as N)	48.7	*****	37.4	mg/l	*****	*****	*****	
Mon. Location.: Influent	Daily	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite	Max.: Monitoring		Avg.: Monitoring					
Frequency: Monthly	Required		Required					
Phosphorus, total (as P)	5.7	*****	5.7	mg/l	*****	*****	*****	
Mon. Location.: Influent	Daily	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite	Max.: Monitoring		Avg.: Monitoring					
Frequency: Monthly	Required		Required					
Nitrogen, Kjeldahl, total (as N)	46.6	*****	46.6	mg/l	*****	*****	*****	
Mon. Location.: Influent	Daily	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite	Max.: Monitoring		Avg.: Monitoring					
Frequency: Monthly	Required		Required					
Nitrite plus nitrate total (as N)	<0.10	*****	<0.10	mg/l	*****	*****	*****	
Mon. Location.: Influent	Daily	*****	Monthly		*****	*****		
Sample Type: 24 Hour Composite	Max.: Monitoring		Avg.: Monitoring					
Frequency: Monthly	Required		Required					

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 here, 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 8, 2021

User Phone Number
(573)365-0455

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

Permit Number	Outfall Number
MO0103241	001Q
Monitoring Period	
10/1/21	12/31/21
NODI: *****	

Parameters	Reporting Requirements			Unit	Reporting Requirements			Unit
Oil and grease	<4.8	*****	<4.8	mg/l	*****	*****	*****	
Mon. Location.: End of Pipe	Daily Max.:15	*****;*****	Monthly Avg.:10		*****;*****	*****;*****		
Sample Type: Grab								
Frequency: Quarterly								
Cadmium, total recoverable	<5.0	*****	<5.0	ug/l	*****	*****	*****	
Mon. Location.: End of Pipe	Daily Max.:Monitoring Required	*****;*****	Monthly Avg.:Monitoring Required		*****;*****	*****;*****		
Sample Type: 24 Hour Composite								
Frequency: Quarterly								
Selenium (Se), total recoverable	<1.0	*****	<1.0	ug/l	*****	*****	*****	
Mon. Location.: End of Pipe	Daily Max.:Monitoring Required	*****;*****	Monthly Avg.:Monitoring Required		*****;*****	*****;*****		
Sample Type: 24 Hour Composite								
Frequency: Quarterly								
Hardness, total (as CaCO3)	398	*****	398	mg/l	*****	*****	*****	
Mon. Location.: End of Pipe	Daily Max.:Monitoring Required	*****;*****	Monthly Avg.:Monitoring Required		*****;*****	*****;*****		
Sample Type: Grab								
Frequency: Quarterly								
Comments:								

Lake of the Ozarks Regional
WWTP 1
13 Anderson Road
JAKE 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, 65112

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 8, 2021

User Phone Number
(573)365-0455

ON TCMR 202

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Operating Budget

REVENUE	FY2018 Actual	FY2019 Actual	FY2020 Actual	FY2021 Budget	FY2021 Projected Year-End	FY2022 Budget
<u>Operating Revenue</u>						
3020 Osage Beach - 85%	480,785	475,092	475,836	473,000	467,500	470,050
3010 Lake Ozark - 15%	69,215	74,908	74,164	77,000	82,500	82,950
3030 Misc.	1,485	-	4,500	-	22,000	-
3100 Interest	1,709	4,287	4,019	2,000	3,000	2,500
3030 Waste Haulers' Fee	25,780	26,260	39,320	36,000	56,000	56,000
Total Franchise Fees	\$ 578,974	\$ 580,547	\$ 597,839	\$ 588,000	\$ 631,000	\$ 611,500
Total General Fund Revenues	\$ 578,974	\$ 580,547	\$ 597,839	\$ 588,000	\$ 631,000	\$ 611,500

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Operating Budget

Expenditures	FY2018 Actual	FY2019 Actual	FY2020 Actual	FY2021 Budget	FY2021 Projected Year-End	FY2022 Budget
<u>Operations and Maintenance</u>						
4000 Transfer to Equip. Replace. Fund	41,604	41,604	71,604	121,606	121,606	55,000
4020 Equip & Bldg. Repair/Main.	9,714	104,063	26,299	36,800	101,665	142,000
4140 Insurance	18,475	18,761	19,865	19,200	21,493	22,000
4150 Vehicle Repair/Main.	3,887	5,480	12,480	8,000	12,000	8,000
4160 Haulers fees to contractor	8,000	-	-	-	-	-
4170 Contract Management	319,011	299,592	305,580	314,752	308,640	327,158
4175 Electric Service	79,533	73,277	75,077	75,000	81,500	92,000
4176 Utilities Misc.	-	3,717	2,486	3,500	3,600	3,750
4190 Bank Charges	24	176	33	-	-	-
4200 Audit	2,300	2,400	2,648	2,600	2,600	2,700
4240 Equipment - New Generator	-	145,247	-	500	500	500
Total Operations and Maintenance	\$ 482,548	\$ 694,317	\$ 516,072	\$ 581,958	\$ 653,604	\$ 653,108

4020 DETAIL: Equip & Bldg. Repair/Main.

Auto Dialer Yrly Software Fee	500	Tier 1	42
Regular Maintenance	18,000	Tier 1	
UV Bulbs, Quartz Sleeves, Misc.	10,000	Tier 1	
Concrete Steps to outfall	9,000	Tier 1	
Rock for road	2,000	Tier 1	
Parking Lot seamseal & sealcoat	2,500	Tier 1	
Take #2 Aeration Basin, grit removal	100,000	Tier 2	
	142,000		

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Operating Budget

Cash & Equivalent Balance January 1, 2022 - Estimated

Restricted - Fund Reserves

Restricted - Other

Unrestricted

TOTAL Cash & Equivalent Balance January 1, 2022

#REF!

#REF!

Revenue

Osage Beach

Lake Ozark

Misc.

Interest

Waste Haulers' Fee

470,050

82,950

-

2,500

56,000

TOTAL Revenues

\$

611,500

Expenditures

Transfer to Replacement Fund

Equipment & Building Repair/main.

Insurance

Vehicle Maintenance

Contract Management

Electric

Utilities Misc.

Bank Charges

Audit

Professional Services

Equipment Purchase - New

55,000

142,000

22,000

8,000

327,158

92,000

3,750

-

2,700

-

500

TOTAL Expenditures

\$

653,108

Cash & Equivalent Balance December 31, 2022 - Estimated

Restricted - Fund Reserves

Unrestricted

TOTAL Cash & Equivalent Balance December 31, 2022

#REF!

#REF!

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Equipment Replacement Budget

Cash & Equivalent Balance January 1, 2022 - Estimated

Restricted - Fund Reserves

Restricted - Other

Unrestricted

#REF!

TOTAL Cash & Equivalent Balance January 1, 2022

#REF!

Revenue

Interest

5,000

Transfer From Other Funds

55,000

TOTAL Revenues

\$ 60,000

Expenditures

Replacement

59,500

TOTAL Expenditures

\$ 59,500

Cash & Equivalent Balance December 31, 2022 - Estimated

Restricted - Fund Reserves

#REF!

Restricted - Other

Unrestricted

-

TOTAL Cash & Equivalent Balance December 31, 2022

#REF!

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Equipment Replacement Budget

	FY2018 Actual	FY2019 Actual	FY2020 Actual	FY2021 Budget	FY2021 Projected Year-End	FY2022 Budget
REVENUE						
<u>Replacement Revenue</u>						
3000 Transfer from Operating	41,604	41,604	71,604	121,606	121,606	55,000
3100 Interest Earned	5,348	9,002	8,986	6,000	5,500	5,000
Total Revenue	\$ 46,952	\$ 50,606	\$ 80,590	\$ 127,606	\$ 127,106	\$ 60,000

LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD
FY2022 Equipment Replacement Budget

EXPENDITURES	FY2018 Actual	FY2019 Actual	FY2020 Actual	FY2021 Budget	FY2021 Projected Year-End	FY2022 Budget
<u>Replacement Expenditures</u>						
4000 Replacement Expenses	\$42,783	\$41,281	\$85,258	\$221,000	207,162	59,500
	\$42,783	\$41,281	\$85,258	\$221,000	\$207,162	\$59,500

DETAIL: Equipment & Replacement

Replace garage door in headworks Bldg.	3,500	Tier 1
Replace wooden doors w/fiberglass	2,000	Tier 1
Replace lab refrigerator/freezer	3,500	Tier 1
Replacement 6" valve for sludge load station	500	Tier 1
Replace Light Fixtures in headworks & RAS	5,000	Tier 1
Replace aerator gear box - new	45,000	Tier 1
	<u>59,500</u>	