

**OSAGE BEACH / LAKE OZARK
JOINT SEWER BOARD MEETING
AGENDA
AUGUST 18, 2020 @ 4:00 p.m.
LAKE OZARK CITY HALL**

1. CALL TO ORDER

2. ROLL CALL

Mayor, Osage Beach, John Olivarri
Mayor, Lake Ozark, Gerry Murawski
City Administrator, Osage Beach, Jeana Woods
City Administrator, Lake Ozark, Dave Van Dee
Alderman, Osage Beach, Phyllis Marose
Alderman, Lake Ozark, Judy Neels
Public Works Director, Lake Ozark, Matt Michalik
Resident Member, Mr. Gary Hamner

3. MINUTES

Page Numbers

Regular Meeting: July 21, 2020

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4. REPORTS

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July Alliance Report of Operations	17-33
Approval of Flow Charts July 2020	

5. OLD BUSINESS

A. Board Representative update

6. NEW BUSINESS

7. ADDITIONAL DISCUSSION ITEMS

8. ADJOURNMENT

THE NEXT MEETING WILL BE SEPTEMBER 15, 2020 4:00 PM @ LAKE OZARK CITY HALL

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**LAKE OZARK-OSAGE BEACH
JOINT SEWER BOARD**
Meeting Minutes – July 21, 2020

CALL TO ORDER:

Mayor John Olivarri called the meeting to order at 4:04 pm on Tuesday, July 21, 2020 at Lake Ozark City Hall.

ROLL CALL:

Mayor, Osage Beach, John Olivarri- Present
Mayor, Lake Ozark, Gerry Murawski - Present
City Administrator Osage Beach, Jeana Woods - Present
City Administrator Lake Ozark, Dave Van Dee – Present
Alderman Osage Beach, Greg Massey - Absent
Alderman Lake Ozark, Judy Neels- Absent
Public Works Director Lake Ozark, Matt Michalik – Present
Resident Member, Mr. Gary Hamner - Present

MINUTES:

Public Works Director Michalik motioned to approve the meeting minutes of June 16, 2020 his motion was seconded by City Administrator Van Dee, and passed unanimously.

REPORTS:

The June Bill list and Revenue Budget, Expenditure Budget Analysis, Income & Expense Summary and Check Registers and Bank Statements were reviewed. A Motion was made by City Administrator Woods to approve the documents and pay the bills. Her motion was seconded by Mayor Murawski, and was passed unanimously.

Alliance Report of Operations: The average daily incoming flow for June was 1.957 mgd. We had 4.8 inches of precipitation measured at the WWTP.

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD of 2.0 mg/l and TSS of 1.8 mg/l respectively for June, which represents a 99.1% or better removal.

The MLSS average for both aeration basins was 6,321 mg/l. The total dry weight sludge inventory for June totaled 403,327 pounds. 25 loads of Biosolids was applied in June. There were 6 tanker loads or 18,000 gallons of septage received for the month.

APPROVAL OF FLOW CHART

Motion was made by Public Works Director Michalik to approve the Flow Chart for June. His motion was seconded by City Administrator Woods. Unanimous approval, motion passed.

OLD BUSINESS:

A. Public Works Director Michalik stated there were no updates at this time.
NEW BUSINESS:

ADDITIONAL DISCUSSION ITEMS:

ADJOURNMENT:

With no further business to discuss the meeting adjourned at 4:14 pm.

Approved on:

Mayor, John Olivarri

City Collector, Trisha Kane

JOINT SEWER BOARD
BILL LIST
AUGUST 18, 2020

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
OPERATING FUND BILLS TO BE PAID:	\$	-
EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	46,668.84
EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:	\$	-
TOTAL	\$	46,668.84

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

Account	Check	Paid To:	Description:	Amount:
4000		Equipment Replacement Fund	Payment into ER Fund	\$ 5,967.00
4020		Dam Steel	924209 Repair ratchet & extensions	\$ 40.22
4020		Jani King	August	\$ 195.00
4020		Menards	97419 Shovel & weed killer	\$ 64.98
4020		Menards	97500 Sump pump, tools, tire tubes	\$ 196.22
4020		Menards	98211 tire tube return	\$ (15.98)
4020		Menards	98214 Cleaning UV	\$ 9.42
4020		Menards	98520 PVC Pipe & Fittings UV repair	\$ 43.29
4020		Menards	98581 PVC Glue & Cleaner	\$ 7.08
4020		Menards	98666 Nuts & Washers Skimmer Arm	\$ 10.62
4020		O'Reilly	4046304455 Hex nuts	\$ 4.29
4020		O'Reilly	4046306919 U-Bolts	\$ 47.44
4020		O'Reilly	4046306959 U-Bolts	\$ 11.41
4020		O'Reilly	4046307008 U-Bolts return	\$ (14.87)
4020		Red Valve Co.	679225 Replace Bladder	\$ 766.79
4020		USA Blue Book	289291 Enzymes	\$ 237.77
4020		USA Blue Book	306005 Clarifiers cleaning supplies	\$ 259.02
4020		Xylem Water Solution	3556B32158 UV Lift Switches	\$ 347.17
4150		Bledsoe Auto	62520 Tow Sludge Trk	\$ 253.00
4150		Field Gymmy	7222020 2 MEC Vacuum/Pressure pump	\$ 233.56
4150		Field Gymmy	7232020 Hose connector sludge trk	\$ 178.52
4150		Irwin Diesel Repair	4738 1995 GMC repairs	\$ 2,019.84
4150		O'Reilly	4046302388 Wiper Fluid	\$ 13.74
4170		Alliance Water Resources, Inc.	August	\$ 25,465.00
4175		Ameren MO	11673321	\$ 9,933.24
4175		Ameren MO	98041275	\$ 166.84
4176		AT&T	August	\$ 79.73
4200		Lake Sun Leader	21803 Bid Audit Services	\$ 148.50
				\$ -
TOTAL				\$ 46,668.84

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

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

Irwin Diesel Repair
24302 Highway W
Barnett, MO 65011
tom@irwindiesel.com
573-286-2585



Invoice: 4738
Date: 7/31/2020

Bill To
Joint Sewer Board
PO Box 1985
Lake Ozark, MO 65049
P: 573-216-8398

Service Order	Terms	Due Date	Authorizer	Customer PO	Unit #
123366	Net 30	8/30/2020	Gary Hutchcraft		Vac Truck

Item	Description	Quantity	Rate	Amount
Drive to unit				
Labor	Drive to unit (Service Call) 3 Anderson Road, Lake Ozark, MO	0.50000	\$107.50	\$53.75
Sub Total				\$53.75

Complaint: Diagnose and repair braking system
Cause: Dash valve leaking and Inversion valve failure

Labor	Correction: Chassis / Air Brake / Traveled to roadside where truck had failed. Found that the dash valve was leaking. Replaced dash valve. Also found that the inversion valve was malfunctioning which was causing the spring brakes to apply. Disassembled valve and cleaned so that truck could be used until new inversion valve could be received and installed. Upon receiving new valve, the old valve was replaced. System functions as designed.	5.50000	\$107.50	\$591.25
Parts	Inversion Valve	1.00000	\$243.25	\$243.25
Parts	Dash Valve	1.00000	\$59.72	\$59.72
Sub Total				\$894.22

Complaint: Diagnose and repair overheat
Cause: Fan belts were loose from previous repair

Labor	Correction: Engine / Cooling / Client called for roadside assistance. Fan belts came off. Assisted with the installation of belts and engine shutdown system.	1.50000	\$107.50	\$161.25
Sub Total				\$161.25

Complaint: Repair AC
Cause: Customer request (Inspection)

Item	Description	Quantity	Rate	Amount
Labor	Correction: Chassis / Air Conditioning & Heating / Checked pressures. Pressure was low. Added 2 pounds. Repaired evaporator box, repaired wiring at compressor. System now cools effectively. All blend function cables are not working as designed. The majority of the duct air is venting to the upper vents and defrost. Additional OEM parts will be required to restore system to original design.	1.50000	\$107.50	\$161.25
Parts	Misc. Terminal Connector	4.00000	\$1.50	\$6.00
Parts	12 Gauge Bulk Wire	2.00000	\$1.18	\$2.36
Parts	Refrigerant	2.00000	\$13.22	\$26.44
			Sub Total	\$196.05
Complaint: Weld Bumper				
Cause: Weld cracks on front bumper (Inspection)				
Labor	Correction: Chassis / Chassis / Weld cracks on front bumper	0.75000	\$107.51	\$80.63
Parts	Small Weld	1.00000	\$7.95	\$7.95
			Sub Total	\$88.58
Complaint: Right Rear (FRONT DRIVE) chamber leaking				
Cause: Customer request (Inspection)				
Labor	Correction: Chassis / Air Brake / Right Rear (FRONT DRIVE) chamber leaking	2.00000	\$107.50	\$215.00
Parts	Freightliner OEM Longstroke 30/30	1.00000	\$139.85	\$139.85
			Sub Total	\$354.85
Complaint: Repair air leak at fan hub				
Cause: Customer request (Inspection)				
Labor	Correction: Engine / Cooling / Repair air leak at fan hub- Replaced air line the feeds fan hub.	0.50000	\$107.50	\$53.75
Parts	3/16" Compression Coupler	1.00000	\$14.75	\$14.75
Parts	Brake Air Tubing	4.00000	\$2.19	\$8.76
			Sub Total	\$77.26
Complaint: Repair engine warning system				
Cause: Customer request (Inspection)				
Labor	Correction: Engine / Electrical / Repair engine warning system- Truck had been retrofitted with a Kysor warning and shutdown system. System was malfunctioning causing erroneous warning and shutdown during normal operation. Repaired wiring harness and tested. Truck will no longer shutdown due to this fault. Normal original manufacturer gauges and indicators function as designed.	1.25000	\$107.50	\$134.38
			Sub Total	\$134.38

Return from unit

Item	Description	Quantity	Rate	Amount
Labor	Return from unit 3 Anderson Road, Lake Ozark, MO	0 50000	\$107.50	\$53.75
Sub Total				\$53.75

Unit: Vac Truck VIN: 4V2JCBBE7SR833094
 1995 WhiteGMC WG
 Chassis: 161,193 Miles

Labor	\$1,505.01
Parts	\$509.08
Shop Supplies	\$5.75
Pre Tax Total	\$2,019.84
Barnett, MO (5.7250% of \$0.00)	\$0.00
Total	\$2,019.84
Payments & Credits	\$0.00
Balance Due	\$2,019.84

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FOCUSED ENERGY. For life.

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

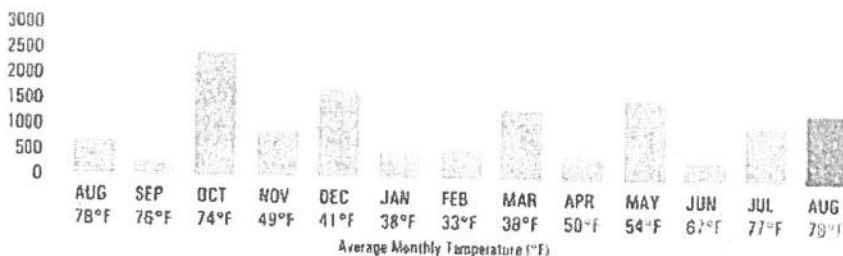
AMOUNT DUE **\$166.84**
Due Date **08/31/2020**

Current Detail for Statement 08/10/2020
Total Electric Charges **\$166.84**
Total Amount Due **\$166.84**

Amount After Due Date **\$169.34**
Previous Statement **\$139.17**
Total Payments **\$139.17**
Payment Received. Thank You

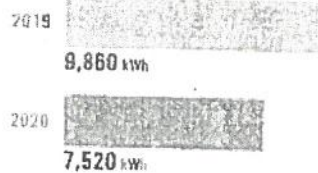
Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using **23.7% less** than last year.

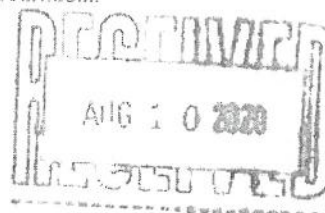


Usage from Jan-Aug for 2019 & 2020

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 or update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.

GL Acct#: 4675
Signature: [Signature]
Date: 8/10/20



See next page for service details.

Keep this portion for your records

Page 1 of 4

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Amount Due	Due Date
\$166.84	August 31, 2020
Delinquent Amount After Due Date	Account Number
\$169.34	5580005920

Amount Enclosed \$

>000355 6380466 0002 092139 102

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

AMEREN MISSOURI
PO BOX 88068
CHICAGO IL 60680-1068

90633000 0055800059200 000000166840 000000166840



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Electric Service Details

Service from 07/08/2020 - 08/06/2020 (29 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
98041275	07/08 - 08/06	29	Total kWh	Actual	20353.0000	20215.0000	138.0000	10.0000	1380.0000
98041275	07/08 - 08/06	29	Peak kW	Actual	4.7340	0.0000	4.7340	10.0000	47.3400

Usage Summary

Total kWh 1380.0000

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

Threshold Peak Demand

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Total Energy Charge	1,380.00	kWh	@ \$ 0.10430000	\$143.93
Customer Charge				\$19.98
Fuel Adjustment Charge	1,380.00	kWh	@ \$ 0.00207000	\$2.86
Energy Efficiency Investment Charge	1,380.00	kWh	@ \$ 0.00374300	\$5.17
Renewable Energy Adjustment	1,380.00	kWh	@ \$ 0.00044000	\$0.61
Total Service Amount				\$166.84
Total Electric Charges				\$166.84

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
July 27, 2020	\$139.17

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

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

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



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

Current Detail for Statement 08/10/2020

Total Electric Charges \$9,933.24
Total Amount Due \$9,933.24

AMOUNT DUE \$9,933.24

Due Date 08/31/2020

Amount After Due Date \$10,082.24

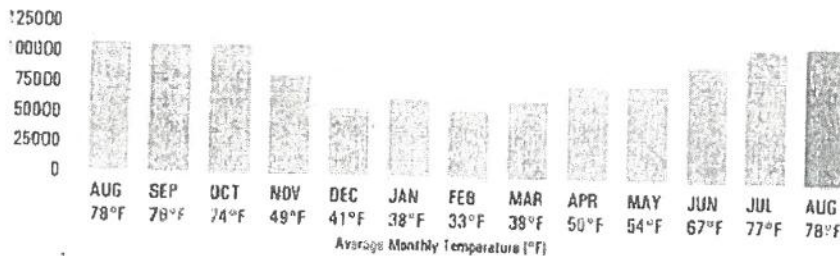
Previous Statement \$9,819.76

Total Payments \$9,819.76

Payment Received, Thank You.

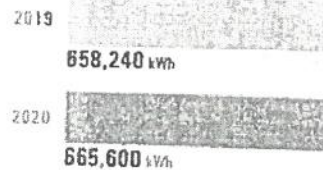
Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using 1.1% more than last year.



Usage from Jan Aug for 2019 & 2020

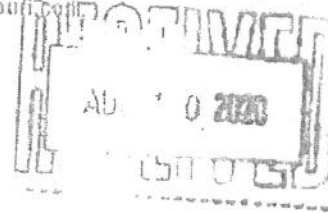
Keeping You Informed.

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

GL Acct# 4175

Signature: *[Signature]*

Date: 8/10/20



See next page for service details.

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Page 1 of 4



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Amount Due	Due Date
\$9,933.24	August 31, 2020
Delinquent Amount After Due Date	Account Number
\$10,082.24	4580005832

Amount Enclosed \$

>000193 6380466 0002 072139 102

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

AMEREN MISSOURI
PO BOX 88068
CHICAGO IL 60680 1068

80600000 0045800058302 000009933240 000009933240



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Electric Service Details Service from 07/08/2020 - 08/06/2020 (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	07/08 - 08/06	29	Total kWh	Actual	61150.0000	60438.0000	712.0000	160.0000	113920.0000
11873321	07/08 - 08/06	29	Peak kW	Actual	1.4400	0.0000	1.4400	160.0000	230.4000

Usage Summary

Total kWh	113920.0000	Peak kW	230.4000
Billing Demand	230.4000	Total Billing Demand	230.4000

Rate 3M Large General Service

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Demand Charge	230.40	kW	@ \$ 5.40000000	\$1,244.16
Energy Charge/Hours Used	34,560.00	kWh	@ \$ 0.09690000	\$3,348.86
Energy Charge/Hours Used	46,080.00	kWh	@ \$ 0.07290000	\$3,359.23
Energy Charge/Hours Used	33,280.00	kWh	@ \$ 0.04910000	\$1,634.05
Customer Charge				\$95.29
Fuel Adjustment Charge	113,920.00	kWh	@ \$ 0.00207000	\$235.81
Energy Efficiency Investment Charge	113,920.00	kWh	@ \$ 0.00383900	\$437.34
Renewable Energy Adjustment	113,920.00	kWh	@ \$ 0.00044000	\$50.12
Total Service Amount				\$9,933.24
Total Electric Charges				\$9,933.24

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
July 27, 2020	\$9,819.76

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

Page 2 of 4

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 Address _____
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 Phone Number _____

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ONLINE CREDIT CARD	MAIL STOP & CHECK	

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

7/31/2020

Account Number	Account Name	2018 Actual	2019 Actual	2020 Budget	2020 Actual as of 7/31/2020	2020 July Revenue	Percent YTD
3020	Osage Beach	480,784.67	475,091.53	473,000.00	279,278.26	39,925.00	59%
3010	Lake Ozark	69,215.30	74,908.46	77,000.00	41,555.08	5,908.33	54%
3030	Misc.	1,485.00	0.00	0.00	4,500.00	0.00	0%
3100	Interest	1,484.82	4,286.79	1,400.00	213.40	2.36	15%
3060	Waste Haulers' Fee	25,780.00	26,260.00	29,000.00	23,340.00	8,400.00	80%
Total Operating Fund		578,749.79	580,546.78	580,400.00	348,886.74	54,235.69	60%
E/R Fund Income		4,281.74	9,001.77	4,000.00	1,314.72	76.42	33%
TOTAL INCOME		583,031.53	589,548.55	584,400.00	350,201.46	54,312.11	60%

MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
7/31/2020

Account Number	Account Name	2018 Actual	2019 Actual	2020 Budget	2020 Actual as of 7/31/2020	2020 July Expenses	Percent YTD
4000	Equipment Replace Fund	41,604.17	41,604.00	71,606.00	41,769.00	5,967.00	58%
4020	*Maintenance & Repair	9,713.86	104,062.97	88,000.00	15,159.44	1,045.52	17%
4140	Insurance	18,475.25	18,761.00	19,200.00	19,084.00	(686.00)	99%
4150	Vehicle Repair/Maint	3,887.47	5,479.60	10,000.00	6,460.84	111.70	65%
4160	Haulers Fees to Contractor	8,000.00	0.00	0.00	0.00	0.00	0%
4170	Contract Management	319,010.64	299,592.00	308,580.00	178,255.00	25,465.00	58%
4175	Electric	79,533.37	73,276.87	75,000.00	38,799.93	9,958.93	52%
4176	Utilities MISC.	0.00	3,717.52	3,100.00	1,765.72	78.66	57%
4190	Bank Charges	24.00	176.00	75.00	32.60	0.00	0%
4200	Audit	2,300.00	2,400.00	2,500.00	2,500.00	0.00	100%
4240	Capital Purchases	0.00	145,247.00	0.00	0.00	0.00	0%
	Totals	482,548.76	694,316.96	578,061.00	303,826.53	41,940.81	53%
	**E/R Expenses	42,782.61	41,280.51	83,500.00	39,522.80	0.00	47%
	TOTAL EXPENSES	525,331.37	735,597.47	661,561.00	343,349.33	41,940.81	52%

*Maintenance & Repair

Auto Dialer Yrly Software Fee

500.00

Regular Maintenance

11,000.00

UV Spare Parts

10,000.00

Road and parking lot main

2,000.00

Chainlink fence repair

4,000.00

Box of BOD bottles

500.00

Sandblast & paint clarifier #2

60,000.00

FALL 2020

88,000.00

**Equipment & Replacement

2019

Pista Gr t Suction tube

5,500.00

RAS motor control ctr/elec panel

37,670.00

Replace lift station pump

8,000.00

Impeller & volute wear ring for Flygt pump

3,000.00

Ducking skimmer arm mechanism

12,000.00

Replace winch for pulling lift station pumps & skim

3,000.00 X

Rebuild Ducking skimmer arm & arm supports

5,000.00

Replace wooden doors w/fiberglass

2,000.00

Repair/replace roof on headworks & other bldg

45,000.00

83,500.00

OPERATING FUND INCOME AND EXPENSE SUMMARY
7/31/2020

Beginning Balance	295,036.77
Income - Osage Beach	39,925.00
Income - Lake Ozark	5,908.33
Income - Other	686.00
Income - Waste Haulers' Fees	8,400.00
Interest - Checking	2.36
Income - CD Interest	-
Transfers From E/R Fund	-
Transfers to E/R Fund	(5,967.00)
Expenses	(39,159.81)
Ending Fund Balance	304,831.65
Central Bank - NOW Acct.	91,023.97
	-
CD First Bank of the Lake, 2/20/21 #101318432	103,807.68
CD First Bank of the Lake, 4/22/21 #101318433	110,000.00
	-
Outstanding Checks:	-
	304,831.65

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
7/31/2020

Beginning Balance	534,638.64
Interest - Checking	76.42
Income - CD Interest	-
Transfers to E/R Fund	5,967.00
Income - Miscellaneous	-
Expenses	-
Ending Fund Balance	540,682.06
First Bank of the Lake - Money Mkt.	124,481.65
CD Providence Bank, 8/20 #1268880	207,553.78
CD First Bank of the Lake, 2/20/21 #101318431	101,942.14
CD First Bank of the Lake, 07/30/21 #101318430	106,940.74
	-
Outstanding Checks:	(236.25)
	540,682.06

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**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



REPORT OF OPERATIONS

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

Month of July 2020

Submitted by Alliance Water Resources, Inc. for the

August 2020

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 Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/L
Monthly Average	2.2	2.1	N/A	16.2	0.58	< 4.9	< 1.0
Peak Day	3.2	3.2	8.0	57	2.10	< 4.9	< 1.0
Percent Removal	98.7	98.9	N/A	N/A	N/A	N/A	N/A

NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	pH	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/ L
Monthly Average	30	30	6-9	126	1.1	10	3.6
Weekly Average	45	45		630			
Daily Max				N/A	6.0	15	9.1

PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 2.098 MGD or 70% of Permitted flow with Lake Ozark contributing 13% of the total flow and Osage Beach contributing 87%. 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 95379 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 69 tanker loads of bio-solids during the month equivalent to a total of 255,300 gallons and 77,268 pounds dry weight solids.

138,243 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 585,000 gallons with a level of 6.0 feet in Tank 1 and 7.0 feet in Tank 2.

WASTEHAULERS

The plant received 88 loads of septage during the month totaling 208,000 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)
- The flex coupling on the sludge truck broke on the 22nd of July and we had one overnighted in and had it back going on the 24th.
- We took the sludge truck to the shop since we could not hall due to the rain on the afternoon of the 29th of July to finish up on the air valve that had been on backorder and a few other small items and when he had it, he got the AC working.

SAFETY

- We conducted our monthly routine Safety Meeting on Sewage, Wastewater and Water Line Maintenance Safety & Excavation and Trenching on the 22nd of July.

REGULATORY AGENCY, INSPECTION AND REPORTS

- We filled out the EDMR on MDNR's website on the 7th of August.
- We received the lab results for our 3rd quarter 503 sludge samples on the 24th of July and everything looked good.

MISCELLANEOUS AND RECOMMENDATIONS

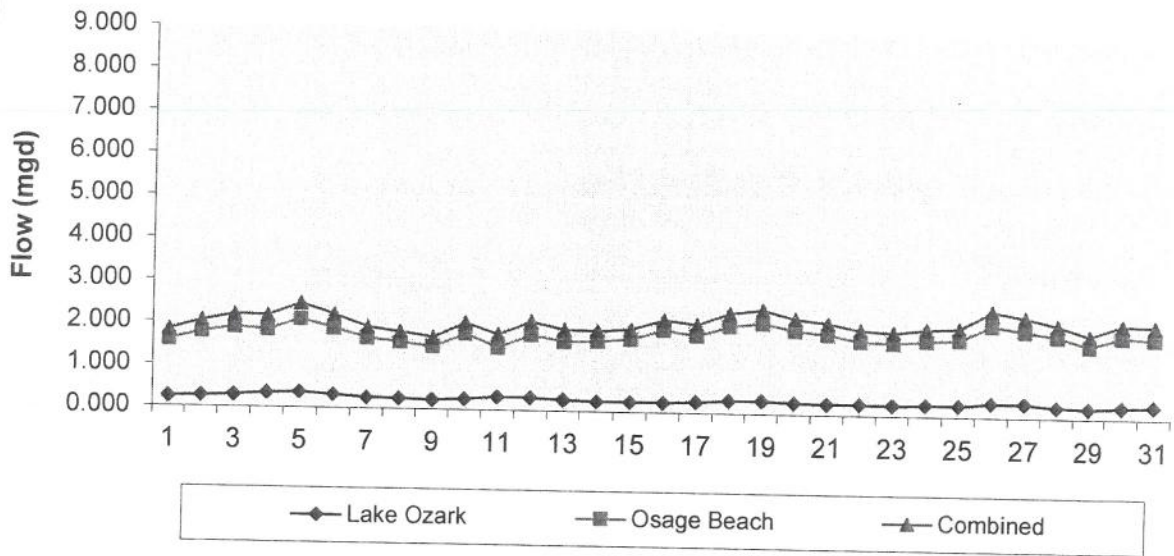
- We received a call from Jeff Carroll with Above & Beyond Roofing on the 7th of August concerning the Headworks building re-roof project metal and he said that the shipment/delivery of the metal has been moved out to August 30, 2020 due to the Covid-19 epidemic.

TABLE A
LAKE OZARK/OSAGE BEACH WWTP

MONTH OF July 2020

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-Jul	0	0.245	1.578	1.823	13.4	86.6						
2-Jul	0.5	0.264	1.775	2.039	12.9	87.1						
3-Jul	0	0.296	1.891	2.187	13.5	86.5	303	245	198	252	204	218
4-Jul	0.65	0.342	1.832	2.174	15.7	84.3						
5-Jul	0.65	0.368	2.094	2.462	14.9	85.1						
6-Jul	0	0.319	1.890	2.209	14.4	85.6						
7-Jul	0	0.255	1.665	1.920	13.3	86.7						
8-Jul	0	0.242	1.581	1.823	13.3	86.7						
9-Jul	0	0.222	1.485	1.707	13.0	87.0	235	155	173	246	122	174
10-Jul	0	0.257	1.797	2.054	12.5	87.5						
11-Jul	0	0.315	1.479	1.794	17.6	82.4						
12-Jul	0	0.312	1.788	2.100	14.9	85.1						
13-Jul	0	0.272	1.648	1.920	14.2	85.8						
14-Jul	0	0.233	1.668	1.901	12.3	87.7						
15-Jul	0.0	0.234	1.715	1.949	12.0	88.0						
16-Jul	0.5	0.234	1.952	2.186	10.7	89.3						
17-Jul	0	0.264	1.830	2.094	12.6	87.4	225	200	200	200	212	266
18-Jul	0.1	0.307	2.059	2.366	13.0	87.0						
19-Jul	0	0.314	2.146	2.460	12.8	87.2						
20-Jul	0.5	0.278	1.982	2.260	12.3	87.7						
21-Jul	0.2	0.259	1.904	2.163	12.0	88.0						
22-Jul	0	0.262	1.747	2.009	13.0	87.0						
23-Jul	0	0.249	1.716	1.965	12.7	87.3						
24-Jul	0	0.269	1.775	2.044	13.2	86.8	350	193	163	324	138	192
25-Jul	0	0.275	1.810	2.085	13.2	86.8						
26-Jul	0	0.334	2.163	2.497	13.4	86.6						
27-Jul	1.9	0.329	2.032	2.361	13.9	86.1						
28-Jul	0	0.258	1.921	2.179	11.8	88.2						
29-Jul	0	0.239	1.703	1.942	12.3	87.7	383	193	145	546	148	142
30-Jul	0.9	0.276	1.922	2.198	12.6	87.4						
31-Jul	1	0.293	1.889	2.182	13.4	86.6						
SUM	6.9	8.616	56.437	65.053								
AVG		0.278	1.821	2.098	13	87	299	197	176	314	165	198
NOTE: BOLD PRINT INDICATES WEEKEND DAYS												

**Daily Flow
Figure 1**



**Effect of Rainfall on Flow
Figure 2**

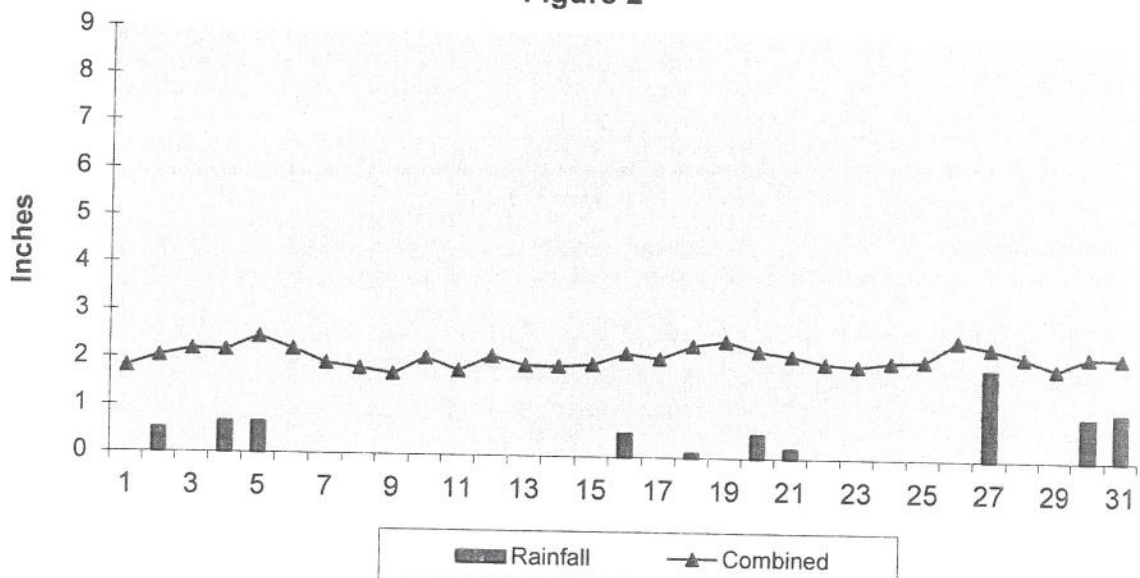
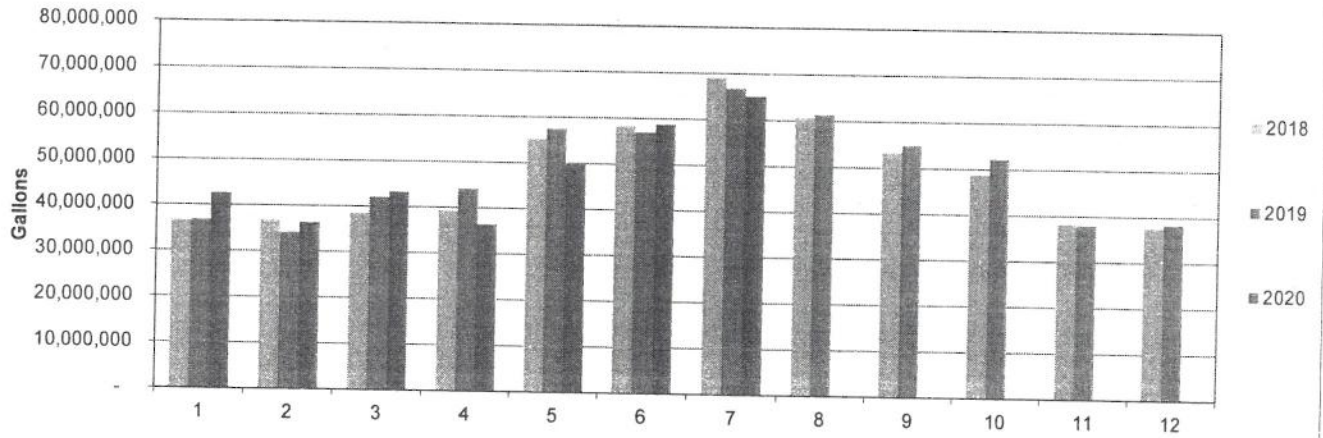


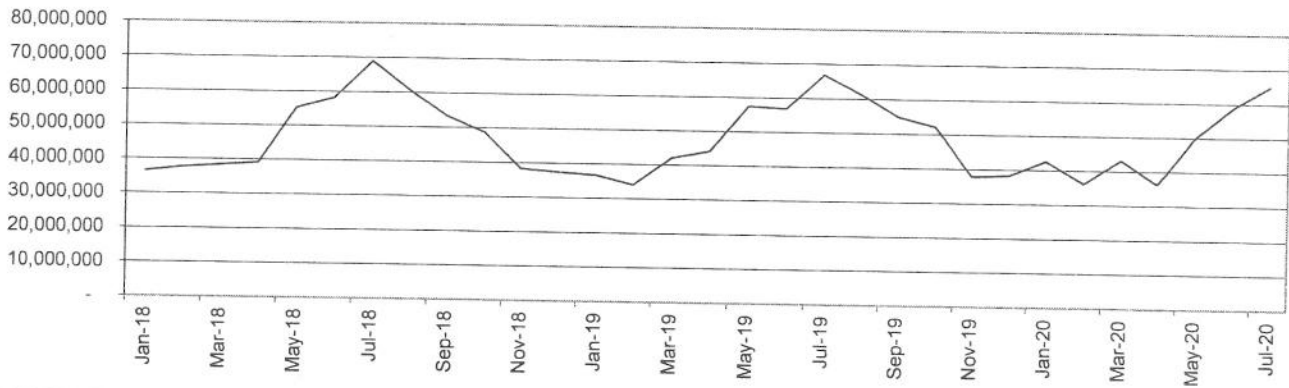
TABLE B
JOINT SEWER BOARD
Monthly Flows

<u>2018</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	2.8	32,190,000	88%	4,345,000	12%	36,535,000	100%
February	5.4	31,846,000	87%	4,861,000	13%	36,707,000	100%
March	3.2	33,424,000	87%	5,010,000	13%	38,434,000	100%
April	1.9	34,339,000	88%	4,896,000	12%	39,235,000	100%
May	5.4	47,620,000	86%	7,610,000	14%	55,230,000	100%
June	3.2	51,063,000	88%	7,125,000	12%	58,188,000	100%
July	2.7	60,484,000	88%	8,550,000	12%	69,034,000	100%
August	6.9	52,916,000	87%	7,679,000	13%	60,595,000	100%
September	3.4	46,228,000	87%	7,013,000	13%	53,241,000	100%
October	7.5	42,037,000	86%	6,738,000	14%	48,775,000	100%
November	3.6	33,221,000	87%	5,089,000	13%	38,310,000	100%
December	6.3	32,452,000	86%	5,123,000	14%	37,575,000	100%
	52.3	497,820,000	87%	74,039,000	13%	571,859,000	100%
<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						-	
September						-	
October						-	
November						-	
December						-	
	39.6	288,249,000	87%	43,817,000	13%	332,066,000	100%

Monthly Influent Flow
Figure 3A

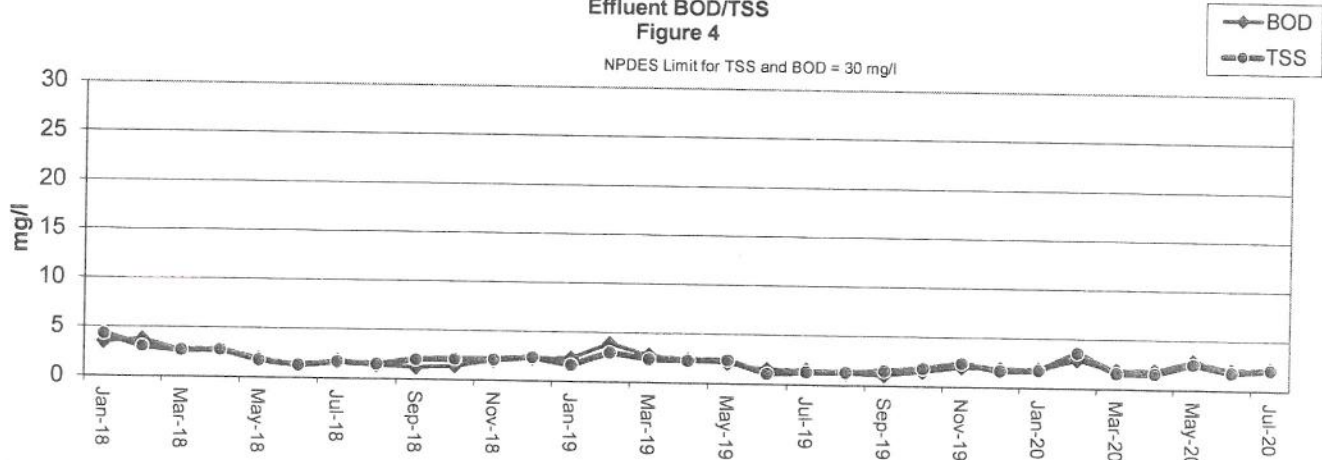


Monthly Influent Flow
Figure 3B



Effluent BOD/TSS
Figure 4

NPDES Limit for TSS and BOD = 30 mg/l

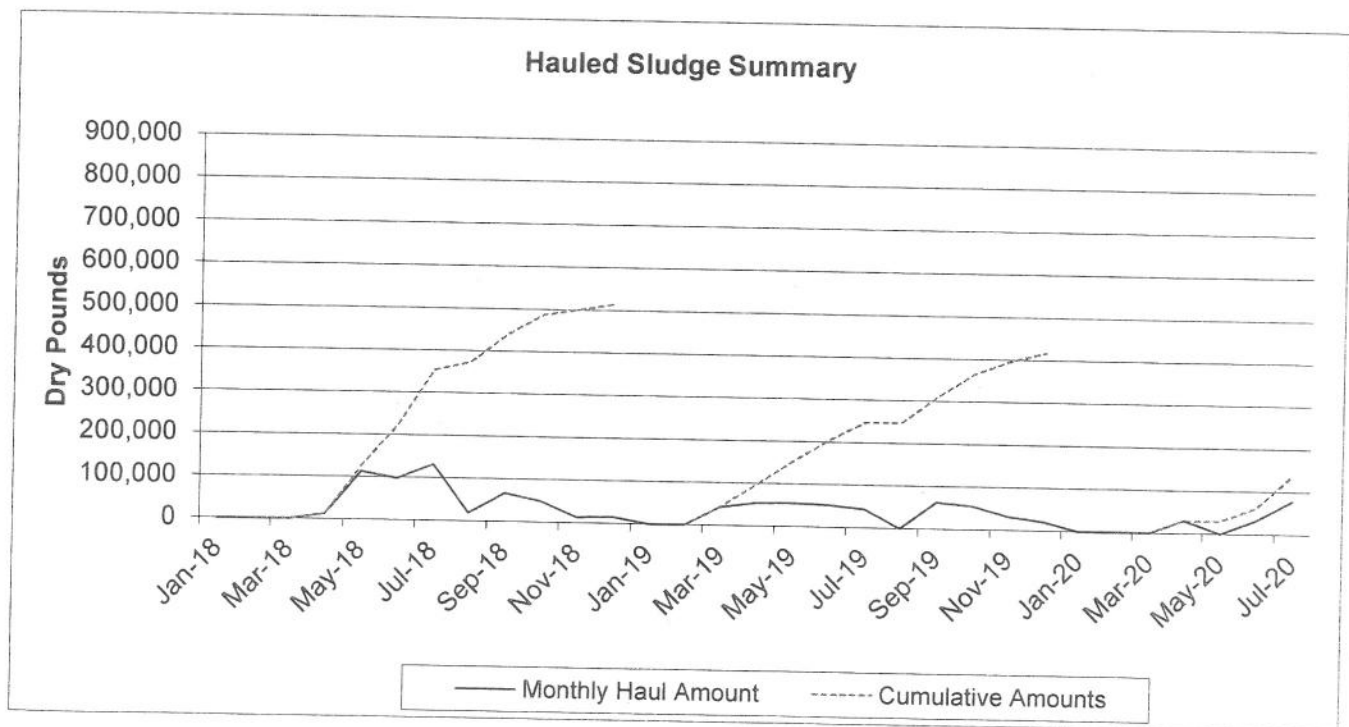
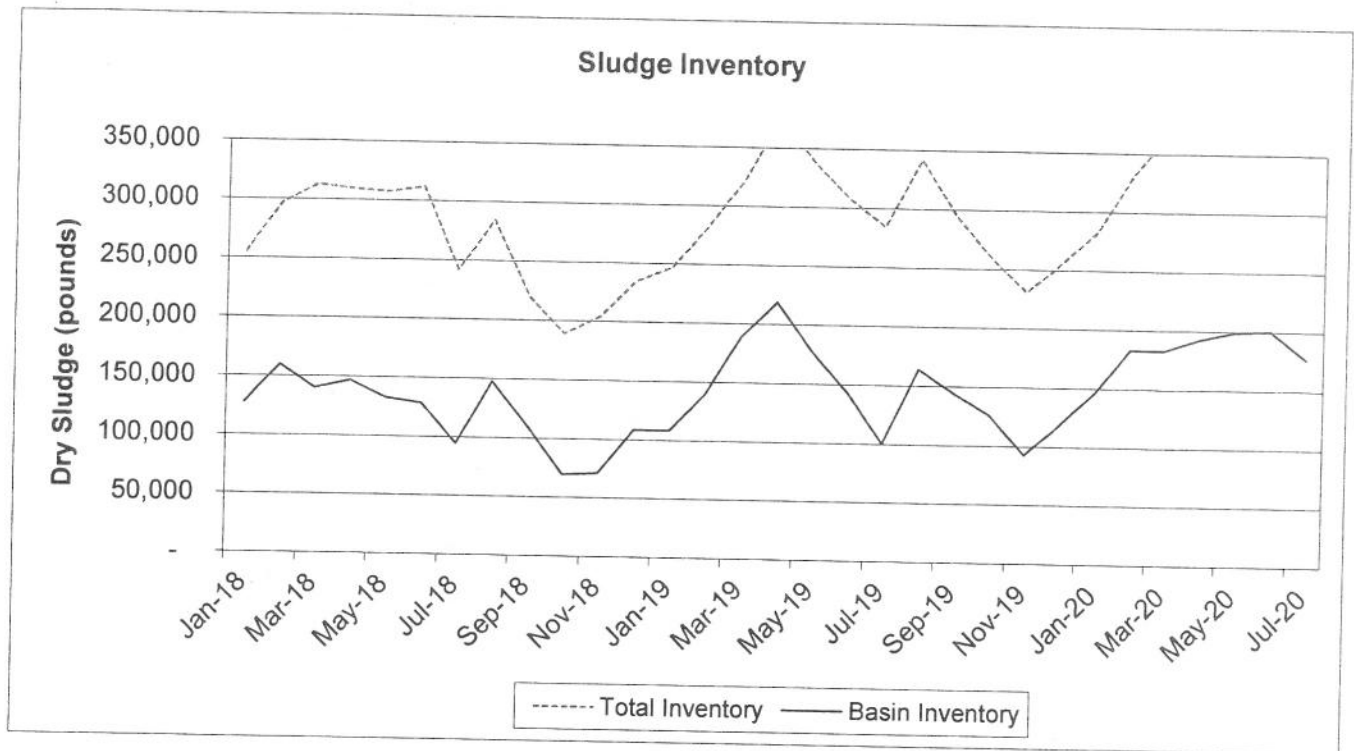


	Loads	Gallons	Hauled Sludge			Annual Cumulative # Dry
			# Dry	% Solids		
Jan-18	0	-	0	3.4%		
Feb-18	0	-	0	3.4%		-
Mar-18	0	-	0	3.4%		-
Apr-18	11	40,700	12,096	3.6%		12,096
May-18	93	344,100	112,693	3.9%		124,789
Jun-18	88	325,000	97,758	3.6%		222,547
Jul-18	126	466,200	131,023	3.4%		353,570
Aug-18	12	44,400	19,441	5.3%		373,011
Sep-18	51	188,700	66,098	4.2%		439,109
Oct-18	38	140,600	48,447	4.1%		487,556
Nov-18	11	40,700	12,899	3.8%		500,455
Dec-18	14	51,800	14,688	3.4%		515,143
Jan-19	0	-	0	3.4%		
Feb-19	0	-	0	3.4%		-
Mar-19	36	133,200	43,139	3.9%		43,139
Apr-19	39	144,300	53,940	4.5%		97,079
May-19	49	181,300	54,866	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	214,600	62,487	3.5%		309,937
Oct-19	50	185,000	54,742	3.5%		364,679
Nov-19	29	107,300	31,629	3.5%		396,308
Dec-19	17	62,900	20,643	3.9%		416,951
Jan-20	0	-	0	3.9%		
Feb-20	0	-	0	3.9%		-
Mar-20	0	-	0	3.9%		-
Apr-20	25	92,500	29,315	3.8%		29,315
May-20	0	-	0	3.8%		29,315
Jun-20	25	92,500	31,660	4.1%		60,975
Jul-20	69	255,300	77,268	3.6%		138,243

Basin Depths						# Dry
Tank #1	Tank #2	AB #1	Basin	Gallons		
5.5	4.5	0.0	450,000	127,602		
7.5	5.0	0.0	562,500	159,503		
5.5	5.5	0.0	495,000	140,362		
5.0	6.0	0.0	495,000	147,114		
4.5	4.5	0.0	405,000	132,638		
4.0	5.5	0.0	427,500	128,589		
3.0	4.5	0.0	337,500	94,853		
5.0	2.5	0.0	337,500	147,778		
4.5	2.5	0.0	315,000	110,338		
3.0	1.5	0.0	202,500	69,776		
2.5	2.5	0.0	225,000	71,309		
6.5	2.0	0.0	382,500	108,459		
5.0	3.5	0.0	382,500	108,462		
6.0	5.0	0.0	495,000	140,362		
6.0	7.0	0.0	585,000	189,462		
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	143,381		
3.0	4.0	0.0	315,000	100,397		
5.5	6.0	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		
6.0	2.0	0.0	360,000	118,148		
6.0	4.0	0.0	450,000	146,367		
6.5	6.0	0.0	562,500	182,959		
5.5	7.0	0.0	562,500	182,959		
6.0	7.5	0.0	607,500	192,528		
6.0	8.0	0.0	630,000	199,660		
6.0	7.0	0.0	585,000	200,228		
6.0	7.0	0.0	585,000	177,054		

Blanket Depths			MLSS Inventory		Blanket and MLSS Inventory		MLSS	Total Dry
Clar #1	Clar #2	Clar #3	MLSS AB #1	MLSS AB #2	Gallons	# Dry	% Solids	Sludge Inventory
0.5	1.0	0.0	4,390	4,040	3,626,643	127,488	0.00422	255,090
2.0	4.0	1.0	4,880	3,920	3,750,000	137,610	0.0044	297,113
0.5	0.5	0.5	5,580	5,780	3,639,476	172,406	0.00568	312,769
0.5	0.5	0.5	5,670	5,040	3,639,476	162,542	0.00536	309,655
0.5	0.5	0.5	5,963	5,547	3,639,476	174,683	0.00576	307,321
4.0	3.0	1.0	6,190	5,490	3,767,762	183,511	0.00584	312,100
1.0	0.5	1.5	4,570	4,990	3,691,785	147,174	0.00478	242,026
2.5	1.0	1.0	4,680	4,170	3,705,595	136,753	0.00443	284,531
0.5	1.0	0.0	3,920	3,340	3,626,643	109,794	0.00363	220,132
0.5	0.5	0.0	4,290	3,640	3,617,762	119,633	0.00397	189,409
1.0	1.0	0.0	4,100	4,640	3,635,524	132,500	0.00437	203,809
11.0	12.0	0.0	4,120	3,420	4,008,526	126,035	0.00377	234,494
1.0	1.0	0.0	4,650	4,480	3,635,524	138,412	0.00457	246,874
1.0	1.0	0.0	4,570	4,740	3,635,524	141,141	0.00466	281,503
0.5	1.0	0.0	4,780	3,920	3,626,643	131,571	0.00435	321,033
1.5	0.5	1.0	5,720	4,530	3,678,952	157,248	0.00513	375,923
3.0	1.5	1.0	5,150	5,160	3,723,357	160,077	0.00516	337,113
2.0	4.0	1.5	5,610	4,810	3,771,714	163,886	0.00521	307,267
2.0	3.0	0.5	6,060	5,630	3,710,524	183,973	0.00595	284,370
5.0	3.0	0.5	5,690	5,680	3,763,810	177,982	0.00567	341,988
2.0	1.0	1.0	4,460	5,310	3,696,714	150,607	0.00489	294,741
2.5	3.0	1.0	4,170	4,350	3,741,119	132,916	0.00426	259,414
3.5	5.0	0.0	4,980	3,850	3,750,977	138,115	0.00442	230,968
1.0	1.0	0.0	5,090	3,940	3,635,524	136,896	0.00452	255,044
1.0	1.5	0.0	4,260	4,690	3,644,405	136,015	0.00448	282,382
3.5	2.0	0.0	5,190	4,390	3,697,691	147,718	0.00479	330,676
2.0	5.0	1.0	5,760	5,940	3,767,762	183,825	0.00585	366,784
1.0	1.0	1.0	5,740	5,290	3,678,952	169,214	0.00552	361,742
1.0	7.0	1.0	5,584	5,663	3,785,524	177,557	0.00562	377,216
6.0	7.0	0.5	6,195	6,446	3,852,620	203,099	0.00632	403,327
7.0	7.0	1.0	6,541	6,827	3,892,096	222,027	0.00684	399,081

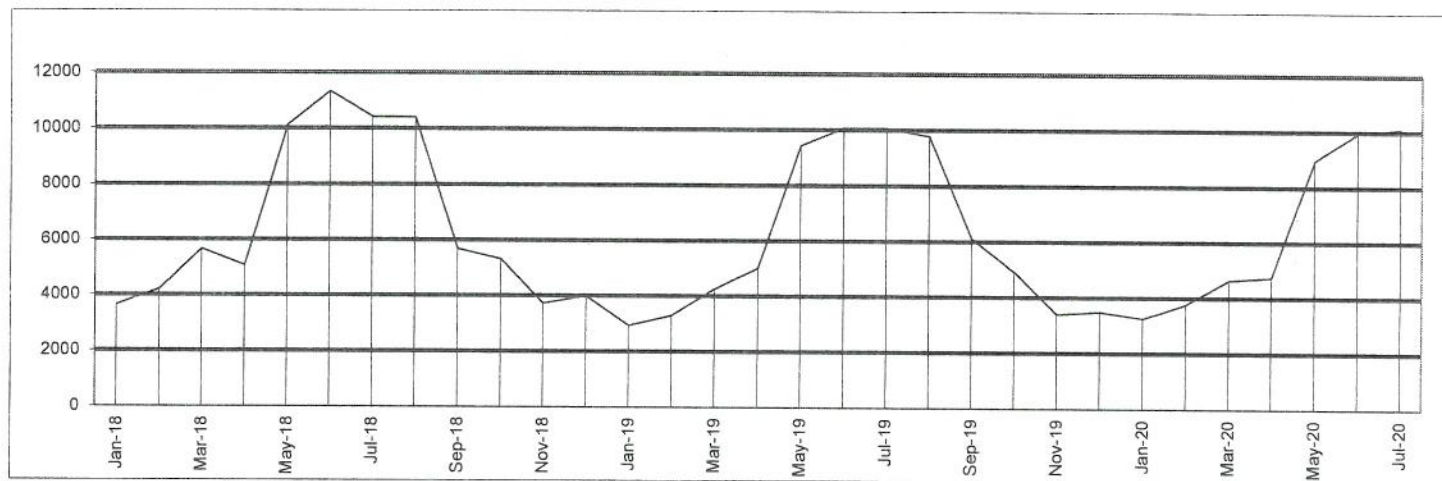
Accepted Septage	
Loads	Gallons
5	12,500
16	40,000
6	15,000
8	20,000
10	24,500
38	95,000
42	107,000
30	75,000
45	113,500
21	59,500
8	21,500
22	55,000
19	46,500
31	79,500
9	21,500
23	61,500
12	25,500
19	47,500
36	84,000
29	72,500
22	55,000
40	97,000
15	36,000
14	32,000
16	34,100
23	57,000
25	64,500
39	107,000
35	83,000
6	18,000
88	208,000



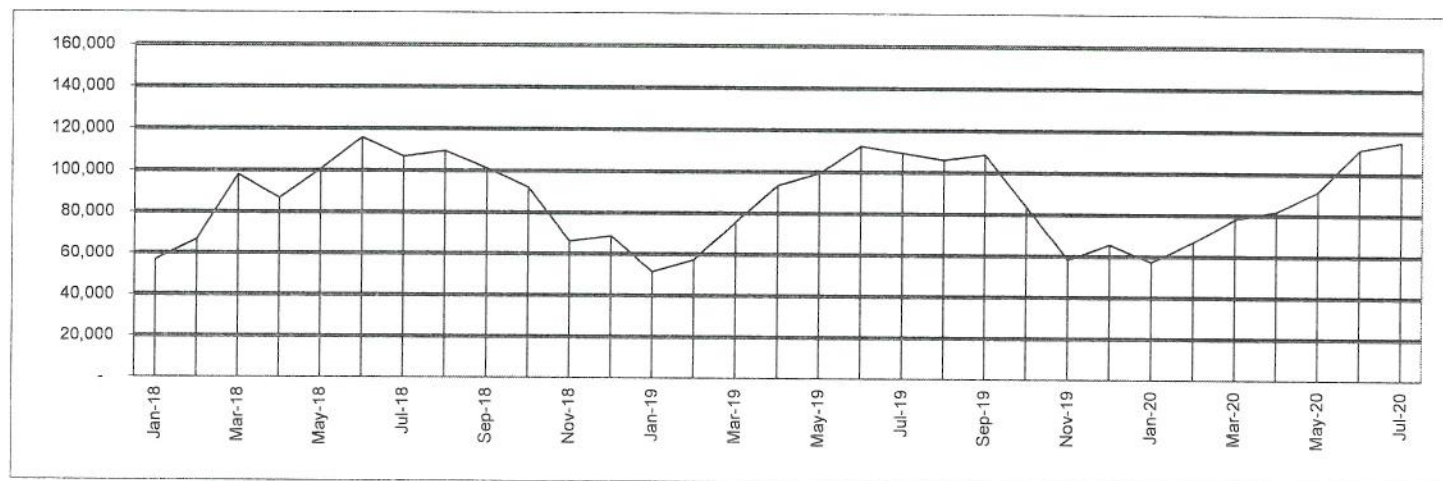
Electric Cost Kilowatts Used

Jan-18	3640	56,750
Feb-18	4207	66,930
Mar-18	5667	98,010
Apr-18	5060	86,650
May-18	10116	100,520
Jun-18	11336	115,750
Jul-18	10417	106,550
Aug-18	10400	109,290
Sep-18	5685	101,170
Oct-18	5317	92,210
Nov-18	3731	66,280
Dec-18	3990	68,840
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

Electric Cost



Kilowatts Used





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

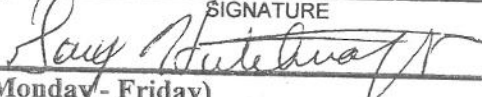
NAME OF FACILITY						LOCATION ADDRESS & CITY								COUNTY/REGION	
Lake of the Ozarks Regional WWTP #1						#3 Anderson Road								Miller/SWRO	
MONTH/YEAR		PERMIT NUMBER				OUTFALL NUMBER		TYPE TREATMENT FACILITY							
Jul-20		MO-0103241				#001		Oxidation Ditch/UV/Sludge Holding-sludge is land applied							
INFLUENT					EFFLUENT								% Removal		
DATE	pH UNITS	BOD mg/L	TSS 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	7.4			22.6	2.104	7.6				4.2		24.1			
2	7.2			23.6	2.251	7.7			0.07	4.1		24.4			
3	6.7	198	218	23.2	2.472	7.5	1.2	0.8		4.4		24.1	99.4	99.6	
4	7.2			23.2	2.426	7.8				4.3		24.5			
5	7.2			24.2	2.724	7.4				4.0		24.5			
6	6.8			23.5	2.377	7.5				4.2	< 20	25.2			
7	6.9			23.4	2.107	7.4				4.4		25.5			
8	6.8			23.7	1.976	7.4				4.5		25.7			
9	7.1	173	174	23.6	1.883	7.7	3.2	2.1	0.27	4.6		25.4	98.2	98.8	
10	6.6			24.6	2.250	7.5				4.7		26.2			
11	7.0			24.6	1.888	7.8				4.7		26.0			
12	7.3			25.7	2.276	8.0				4.5		25.7			
13	7.0			24.6	2.088	7.7				4.2	< 20	25.7			
14	7.3			24.1	1.998	7.9				4.4		25.2			
15	7.0			23.8	1.988	7.8				4.2		25.0			
16	7.2			23.8	2.347	7.7			0.27	4.3		25.4			
17	7.1	200	266	25.2	2.100	7.9	2.6	3.2		4.6		26.1	98.7	98.8	
18	7.1			24.3	2.471	7.7				4.0		25.2			
19	6.9			25.9	2.554	7.6				4.1		25.9			
20	7.4			23.1	2.360	7.4				4.7	57	24.8			
21	7.2			24.6	2.224	7.7				4.2		26.1			
22	6.9			24.8	2.058	7.5				4.6		26.1			
23	7.1			24.7	1.963	7.7			0.21	5.2		26.3			
24	7.1	163	192	25.1	2.040	7.6	1.5	1.8		5.1		26.5	99.1	99.1	
25	7.1			24.0	2.399	7.8				5.1		25.7			
26	7.2			24.4	2.289	7.9				5.0		24.6			
27	7.3			24.8	2.510	7.7				4.4	< 20	26.0			
28	7.1			24.4	2.246	7.8			2.1	5.0		26.0			
29	7.1	145	142	24.8	1.992	7.9	2.6	2.8		5.4		26.3	98.2	98.0	
30	7.3			24.5	2.306	7.9				4.4		24.3			
31	7.1			24.9	2.309	7.7				4.5		24.8			
Total					68.976										
Avg		176	198	24	2.225		2.2	2.1	0.58	4.5	16.2	25.4	98.7	98.9	
Min	6.6	145	142	23	1.883	7.4	1.2	0.8	0.07	4.0	< 20	24.1	98.2	98.0	
Max	7.4	200	266	26	2.724	8.0	3.2	3.2	2.10	5.4	57.0	26.5	99.4	99.6	

MONTHLY MONITORING					QUARTERLY MONITORING					
DATE	Oil & Grease mg/L	Selenium µg/L	SM1 Hardness mg/L	SM2 Hardness mg/L	Phosphorus mg/L	SM1 Phosphorus mg/L	T. Nitrogen mg/L	SM1 T. Nitrogen mg/L	TR. Cadmium ug/L	TR. Copper µg/L
1										
2										
3										
4										
5										
6										
7										
8	< 4.9	< 1.0	343	343	4.2	0.83	2.3	0.55	< 5.0	< 10.0
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Total	< 4.9	< 1.0	343	343	4.2	0.83	2.3	0.55	< 5.0	< 10.0
Avg	< 4.9	< 1.0	343	343	4.2	0.83	2.3	0.55	< 5.0	< 10.0
Min	< 4.9	< 1.0	343	343	4.2	0.83	2.3	0.55	< 5.0	< 10.0
Max	< 4.9	< 1.0	343	343	4.2	0.83	2.3	0.55	< 5.0	< 10.0

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				Outside * 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		1.6	7,070	900	24.4	1.3	7,290	900	24.2	77	0	7:30
2		0.7	4,410	870	24.7	0.7	7,070	890	24.7	72	0.5	7:30
3		0.9	4,080	800	24.6	1.2	6,400	910	24.6	74	0	7:30
4		0.8	6,150	880	24.3	0.7	6,610	920	24.1	73	0.65	7:30
5		0.4	7,570	940	24.2	0.4	6,720	940	24.0	73	0.65	7:30
6		0.7	5,840	870	24.9	0.7	6,430	880	24.7	71	0	7:30
7	8,640	0.6	5,440	900	24.9	0.7	6,710	910	24.9	73	0	7:30
8	6,480	0.6	7,490	930	25.4	0.9	6,570	840	25.3	73	0	7:30
9	4,937	0.7	7,500	940	24.8	0.9	7,260	930	24.8	74	0	7:30
10	9,628	0.6	7,350	930	26.2	0.7	7,000	940	25.6	69	0	7:30
11	5,863	0.7	7,520	930	25.5	1.0	7,180	930	25.4	73	0	7:30
12	5,863	0.7	6,940	930	25.6	0.7	6,940	920	25.3	75	0	7:30
13	9,875	0.6	7,020	940	25.8	0.6	7,460	930	24.9	71	0	7:30
14	3,610	0.7	5,110	910	26.9	0.7	5,730	890	25.4	70	0	7:30
15		1.0	6,760	920	24.5	1.5	6,620	930	24.8	78	0	7:30
16		0.8	4,990	850	25.2	0.8	6,360	900	25.3	69	0.5	7:30
17		0.7	6,790	900	25.9	0.9	7,020	920	25.7	73	0	7:30
18		0.7	5,850	870	24.6	0.6	6,760	930	24.5	78	0	7:30
19		0.5	6,750	920	25.9	0.6	6,280	920	25.8	82	0	7:30
20		0.9	6,620	900	24.0	1.0	6,450	900	24.2	75	0.05	7:30
21	4,814	0.6	7,470	950	25.8	0.6	6,910	920	25.7	74	0.2	7:30
22		0.7	6,630	920	25.8	1.3	6,840	900	26.0	74	0	7:30
23		1.2	7,080	910	26.1	1.1	7,120	920	25.9	73	0	7:30
24	6,480	0.8	6,930	930	26.5	0.9	6,480	900	26.3	76	0	7:30
25	9,165	1.2	7,010	930	25.1	1.3	7,020	930	25.3	73	0	7:30
26		1.0	5,390	860	25.4	0.8	6,890	920	25.5	74	0	7:30
27		0.6	7,170	940	25.7	0.5	7,140	940	25.8	75	1.9	7:30
28		0.7	7,250	930	25.7	1.0	7,100	920	25.7	74	0	7:30
29	1,913	1.0	7,210	950	25.9	0.8	7,150	950	25.9	75	0	7:30
30		0.7	6,480	920	24.9	0.6	6,760	940	23.4	73	0.9	7:30
31		0.7	6,890	940	24.5	0.5	7,380	950	24.9	70	1.0	7:30
COMMENTS:												

COMMENTS:

TESTS PERFORMED BY (PRINT) John Hornback	SIGNATURE 	PHONE # (573)365-0455	DATE 8/7/2020
REPORT APPROVED BY (PRINT) Gary Hutchcraft	SIGNATURE 	PHONE # (573)365-0455	DATE 8/7/2020

*Required Daily (Monday - Friday)

**Required 1/week

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources
(REGIONAL OFFICE)
Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

PERMITTEE NAME/ADDRESS

NAME: Lake of the Ozarks Regional WWTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241	001 A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2020	07	01		2020	07	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
BOD, 5-day, 20 deg. C (00310)	REPORTD	*****	*****	*****	3.2	2.2	Weekly	24 Hour Composite
Stage Type: End of Pipe	REORMNT	*****	*****	*****	Weekly Average : 45	Monthly Average : 30	Weekly	24 Hour Composite
BOD, 5-day, percent removal (81010)	REPORTD	*****	*****	*****	*****	98.2	Monthly	Calculated
Stage Type: End of Pipe	REORMNT	*****	*****	*****	*****	Monthly Average Minimum : 85	Monthly	Calculated
Escherichia coli (E. coli) (51040)	REPORTD	*****	*****	*****	57	16.2	Weekly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	*****	7 Day Geometric Mean : 630	30 Day Geometric Mean : 126	Weekly	Grab
Flow, in conduit or thru treatment plant (50050)	REPORTD	2.724	2.225	*****	*****	*****	Daily	Total Measured
Stage Type: End of Pipe	REORMNT	Daily Maximum : Monitoring Required	Monthly Average : Monitoring Required	*****	*****	*****	Daily	Total Measured
Nitrogen, ammonia total (as N) (00610)	REPORTD	*****	*****	2.1	*****	0.58	Weekly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : 6.0	*****	Monthly Average : 1.1	Weekly	Grab
Oil and grease (soxhlet extr.) tot. (00550)	REPORTD	*****	*****	<4.9	*****	<4.9	Monthly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : 15	*****	Monthly Average : 10	Monthly	Grab
pH (00400)	REPORTD	*****	*****	7.4	*****	8.0	Weekly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Minimum : 6.5	*****	Maximum : 9.0	Weekly	Grab

GENERAL PERMIT REQUIREMENTS OR COMMENTS:

OUTFALL-SPECIFIC COMMENTS:

PARAMETER-SPECIFIC COMMENTS:

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.

OPERATOR IN RESPONSIBLE CHARGE

Gary Hutchcraft	7305
TYPED OR PRINTED NAME	CERTIFICATE NUMBER
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE
Gary F Hutchcraft	5733650455
TYPED OR PRINTED NAME	2020-08-07 13:41:33
SIGNATURE	Date

Page 1

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources
(REGIONAL OFFICE)
Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

PERMITTEE NAME/ADDRESS

NAME: Lake of the Ozarks Regional WWTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241	001 A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2020	07	01		2020	07	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Selenium (Se), total recoverable (00981)	REPORTD	*****	*****	<1.0	*****	<1.0	Monthly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : 9.1	*****	Monthly Average : 3.6	Monthly	Grab
Suspended Solids, percent removal (81011)	REPORTD	*****	*****	*****	*****	98.0	Monthly	Calculated
Stage Type: End of Pipe	REORMNT	*****	*****	*****	*****	Monthly Average Minimum : 85	Monthly	Calculated
Total Suspended Solids (TSS) (00530)	REPORTD	*****	*****	*****	3.2	2.1	Weekly	24 Hour Composite
Stage Type: End of Pipe	REORMNT	*****	*****	*****	Weekly Average : 45	Monthly Average : 30	Weekly	24 Hour Composite

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PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE
Gary F Hutchcraft	5733650455
TYPED OR PRINTED NAME	2020-08-07 13:41:33
SIGNATURE	Date

Page 2

PERMITTEE NAME/ADDRESS

State of Missouri

Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources
(REGIONAL OFFICE)
Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

NAME: Lake of the Ozarks Regional W/WTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241	SM2 A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
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FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2020	07	01		2020	07	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Hardness, total (as CaCO ₃) (00900)	REPORTD	*****		343		Monthly	Grab	
Stage Type: Instream Monitoring	REQUIREMT	*****		Daily Maximum : Monitoring Required	mg/L	Monthly	Grab	
				Monthly Average : Monitoring Required				

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Gary Hutchcraft		OPERATOR IN RESPONSIBLE CHARGE	
TYPED OR PRINTED NAME		7305	
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		CERTIFICATE NUMBER	
Gary F Hutchcraft	Gary F Hutchcraft	TELEPHONE	5733650455
TYPED OR PRINTED NAME	SIGNATURE	2020-08-07 13:41:33	
		Date	

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

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PERMITTEE NAME/ADDRESS

NAME: Lake of the Ozarks Regional WWTP I
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241	001 B
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

YEAR	MO	DAY	TO	YEAR	MO	DAY
2020	07	01		2020	09	30

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Cadmium, total recoverable (01113)	REPORTD	*****	*****	<5.0	*****	<5.0	Quarterly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab
Copper, total recoverable (01119)	REPORTD	*****	*****	<10.0	*****	<10.0	Quarterly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab
Nitrogen, total (as N) (00600)	REPORTD	*****	*****	2.3	*****	2.3	Quarterly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab
Phosphorus, total (as P) (00665)	REPORTD	*****	*****	4.2	*****	4.2	Quarterly	Grab
Stage Type: End of Pipe	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab

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Gary Hutchcraft				CERTIFICATE NUMBER
TYPED OR PRINTED NAME				5733650455
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				TELEPHONE
Gary F Hutchcraft				2020-08-07 13:49:15
TYPED OR PRINTED NAME				DATE
SIGNATURE				

Page 1

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
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PERMITTEE NAME/ADDRESS

NAME: Lake of the Ozarks Regional WWTP I
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241	SM1 A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

YEAR	MO	DAY	TO	YEAR	MO	DAY
2020	07	01		2020	09	30

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Nitrogen, total (as N) (00600)	REPORTD	*****	*****	0.55	*****	0.55	Quarterly	Grab
Stage Type: Instream Monitoring	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab
Phosphorus, total (as P) (00665)	REPORTD	*****	*****	0.83	*****	0.83	Quarterly	Grab
Stage Type: Instream Monitoring	REORMNT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Quarterly	Grab

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Gary Hutchcraft				CERTIFICATE NUMBER
TYPED OR PRINTED NAME				5733650455
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				TELEPHONE
Gary F Hutchcraft				2020-08-07 13:49:15
TYPED OR PRINTED NAME				DATE
SIGNATURE				

Page 2

for JULY 2020
month year

Use following abbreviations R-rain, S-snow, O-overcast, C-clear, PC-partly cloudy

Prepared by GH, JH, JP

Approved by _____ GH

Date 8/7/2020