

**MAINTENANCE DEPARTMENT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2021
PREPARED: JANUARY 2022**

MEASURE	MONTH	UNITS	FY YTD	UNITS
WORK ORDERS (W.O.) PROCESSED	151		1018	#
STAFF HOURS REQUIRED FOR W.O.	496.83	HRS.	3145.19	HRS.
NON-CORE DUTIES HOURS	37.83	HRS.	589.44	HRS.
CD. MAN HOURS REQUIRED FOR WO	459	HRS.	2555.75	HRS.
PM FIRE HYDRANTS	0		124	
FIRE HYDRANT REPAIR	0		1	
PM VALVE EXERCISED	0		0	
MANHOLE INSPECTIONS	5		5	
CCTV SEWER LINE	0	L. FT.	2,523	L. FT.
SEWER LINE CLEANED	0	L. FT.	2,888	L. FT.
SL RAT INSPECTIONS	0	L. FT.	36,900	L. FT.
VEHICLES SERVICED/REPAIRED	15		105	
# OF WATER BREAKS	0		3	
# OF SEWER BACKUPS	1		5	
# OF CLEANOUTS INSTALLED	0		0	
# OF MISS UTILITY TICKETS	59		630	
# OF METERS READ	14		177	
# OF METERS SHUT OFF	1		40	
# OF METERS TURNED ON	1		39	
# OF REPLACED METERS	0		0	
# OF REPLACED REGISTERS	0		0	
# OF NEW ACC. METER INSTALLS	0		0	
# OF LEAK CHECKS	80		416	
# OF REPLACED MIUs (Radios)	26		149	
CUSTOMER COMPLAINTS	0		0	
WATER COMPLAINTS REC'D	0		0	
WATER COMPLAINTS RESOLVED	100	%	100	%
WASTEWATER COMPLAINTS REC'D	0		0	
WASTEWATER COMPLAINTS RES'D	100	%	100	%

ACCOMPLISHMENTS

Cleaned spillway, installed french drains, removed dead trees at Hirst Reservoir
 Equipment maintenance
 Leaf removal operations
 Installed Christmas decorations
 Fleet maintenance
 Assisted with Town Christmas events-Tree lighting, parade, etc.
 Community event sign work orders
 Flagger recertification for entire staff
 Street sign repairs
 Tree removal within right of way
 Winterized mowing equipment
 Relocation of radar data signs-per PD
 Removed and replaced concrete slab for gate motor at elevated water tank
 Tree trimming
 Pothole repairs
 Weekly cleaning and restocking of dog waste stations
 Weekly checks/emptying public trash cans
 Cleanup/tree removal along Chapman/DeMary Trail and Suzanne Kane Nature Park Trail
 Assessed condition of large oak trees at Fireman's Field complex with tree contractor
 Facility maintenance issues-replaced faucet at Maintenance facility
 Repaired cracked sidewalk at 21st Street parking lot
 Water/Sewer line easement maintenance-Installed markers at manholes and valves

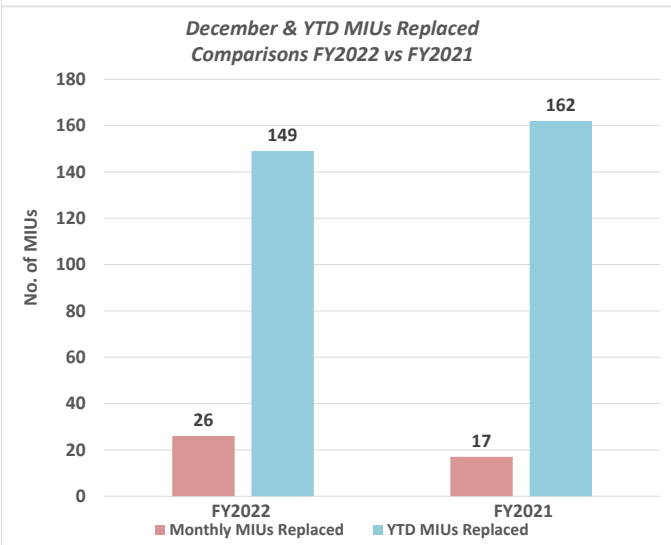
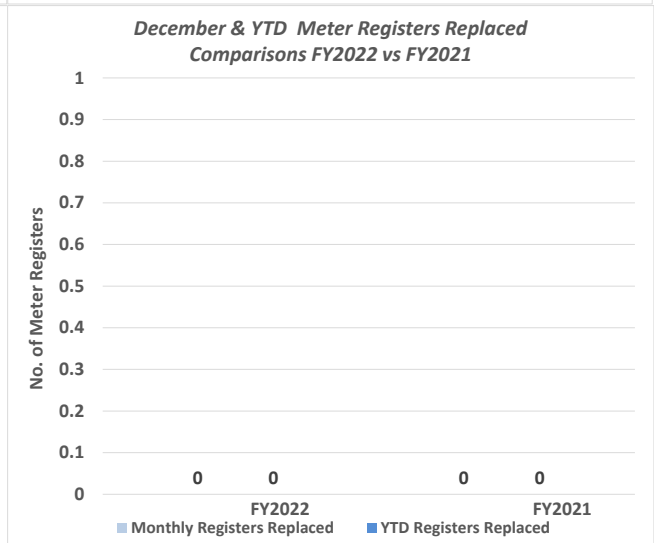
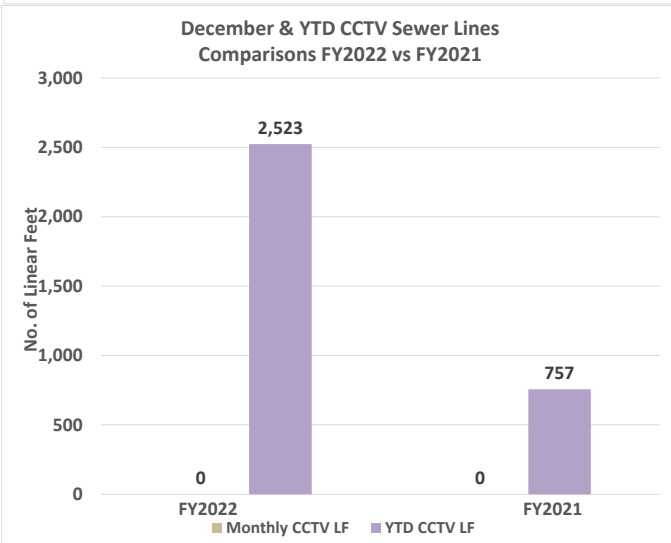
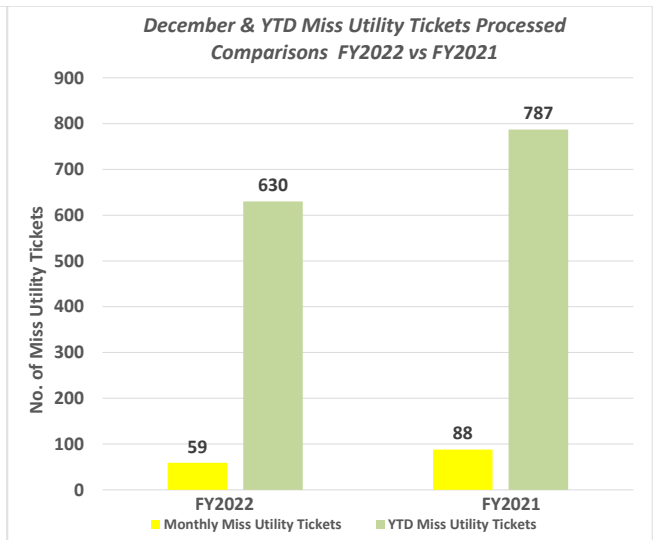
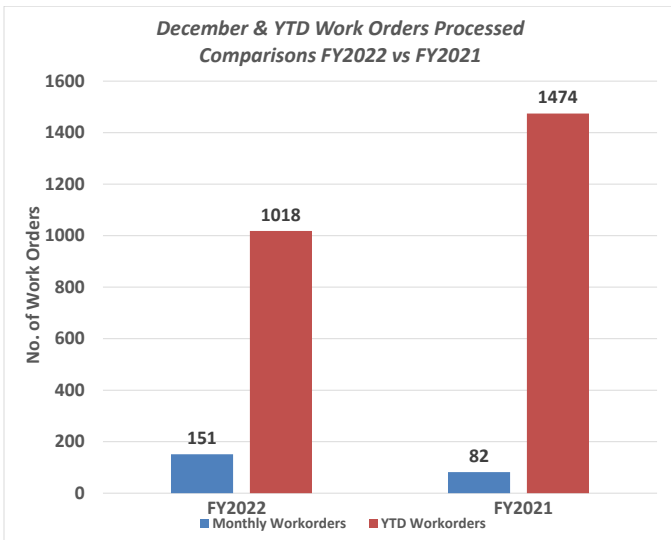
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PREPARED: JANUARY 2021**

MEASURE	MONTH	UNITS	FY YTD	UNITS
WORK ORDERS (W.O.) PROCESSED	82		1474	#
STAFF HOURS REQUIRED FOR W.O.	386.42	HRS.	2490.5	HRS.
NON-CORE DUTIES HOURS	68	HRS.	527	HRS.
CD. MAN HOURS REQUIRED FOR WO	318.42	HRS.	1561	HRS.
PM FIRE HYDRANTS	0		223	
FIRE HYDRANT REPAIR	0		2	
PM VALVE EXERCISED	0		0	
MANHOLE INSPECTIONS	0		178	
CCTV SEWER LINE	0	L. FT.	757	L. FT.
SEWER LINE CLEANED	0	L. FT.	509	L. FT.
SL RAT INSPECTIONS	0	L. FT.	35,134	L. FT.
VEHICLES SERVICED/REPAIRED	14		104	
# OF WATER BREAKS	0		3	
# OF SEWER BACKUPS	0		0	
# OF CLEANOUTS INSTALLED	0		0	
# OF MISS UTILITY TICKETS	88		787	
# OF METERS READ	22		194	
# OF METERS SHUT OFF	0		0	
# OF METERS TURNED ON	0		0	
# OF REPLACED METERS	0		0	
# OF REPLACED REGISTERS	0		0	
# OF NEW ACC. METER INSTALLS	3		15	
# OF LEAK CHECKS	62		321	
# OF REPLACED MIUs (Radios)	17		162	
CUSTOMER COMPLAINTS	0		0	
WATER COMPLAINTS REC'D	0		0	
WATER COMPLAINTS RESOLVED	100		100	
WASTEWATER COMPLAINTS REC'D	0		0	
WASTEWATER COMPLAINTS RES'D	100		100	

ACCOMPLISHMENTS

Cleaned and winterized mowing equipment
 Leaf removal operations
 Community event sign work orders
 Weekly cleaning and restocking of dog waste stations
 Assisted contractor with milling/paving operations on numerous streets
 Installed Christmas decorations on street light poles and business properties
 Assisted contractor with striping of newly paved roads
 Fleet maintenance work orders
 Equipment maintenance
 Assisted Parks and Rec with tree lighting ceremony
 Installed snow markers
 Installed manhole and valve box protectors as needed for snow removal operations
 Emptied public trash cans as needed
 Animal control issues (Removal of deceased animals from Right of Ways)
 Shoulder repairs on G Street, A Street and 20th Street
 Relocated radar data collection signs on 20th Street per PD
 Implemented variable message boards per PD
 Storm drainage cleanup
 Street sign repairs/replacements
 Snow removal operations

**Maintenance Department
2022 vs 2021 Comparisons**



**WATER TREATMENT PLANT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2021
PREPARED: JANUARY 2022**

WATER	MONTH	UNITS	AVG./DAY	UNITS
ALUMINUM SULFATE	958.3	lbs.	30.9	lbs.
POLYMER				
METAPHOSPHATE	121.5	lbs.	3.9	lbs.
SODA ASH	1,249.8	lbs.	40.3	lbs.
FLUORIDE (WTP & WELLS)	172.9	lbs.	5.6	lbs.
POTASSIUM PERMANGANATE	20.0	lbs.	0.6	lbs.
CHLORINE (HYPOCHLORITE @ WTP)	233.8	lbs.	7.5	lbs.
CHLORINE RESIDUAL (TANK)			1.8	mg/L
AVERAGE PH (FINISHED)			7.6	SU
BULK WATER SALES	0	gals.	0.0	gals.
INLINE METER, COOPER SPRINGS	4,354,000	gals.	140,451.6	gals.
JEFFRIES WELL	0	gals.	0.0	gals.
WATER PLANT GALLONS	7,409,000	gals.	239,000.0	gals.
MARSH WELL	1,733,000	gals.	55,903.2	gals.
MOUNTAIN VIEW WELL	528,262	gals.	17,040.7	gals.
MAIN STREET VILLAGES WELLS (MS-1 & VC)	2,278,974	gals.	73,515.3	gals.
CORNWELL #2 WELL	1,664,537	gals.	53,694.7	gals.
FORBES WELL	937,795	gals.	30,251.5	gals.
KANE WELLS #1 AND #2	2,798,900	gals.	90,287.1	gals.
TOTAL WATER FLOW	17,350,468	gals.	559,692.5	gals.

RESERVOIR LEVELS:	1-Dec-2021	31-Dec-2021
FRONT LAKE:	5.62'	4.70'
BACK LAKE	4.50'	5.08'
RAINFALL:	1.54"	

ACCOMPLISHMENTS

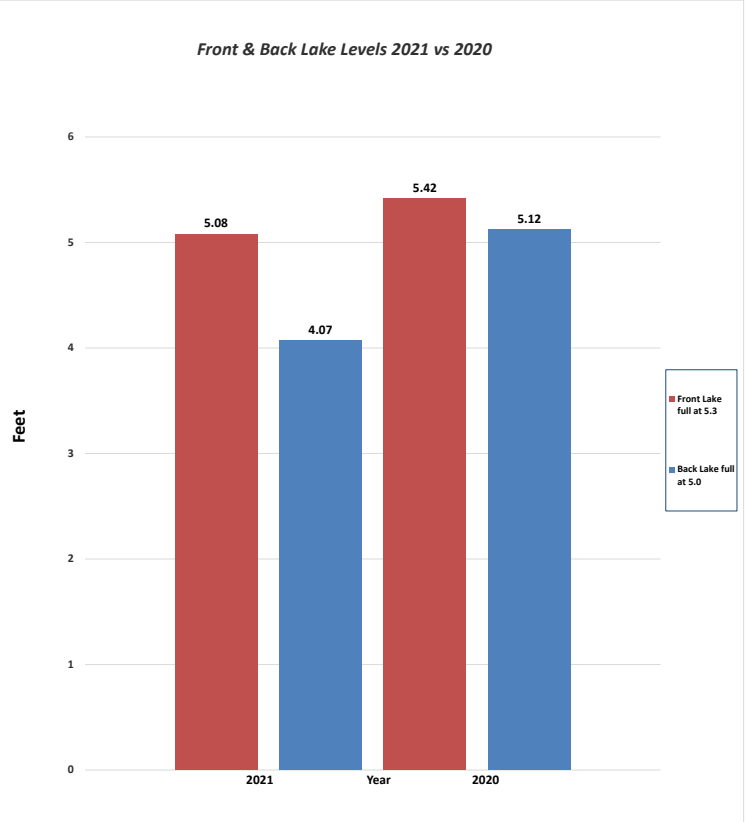
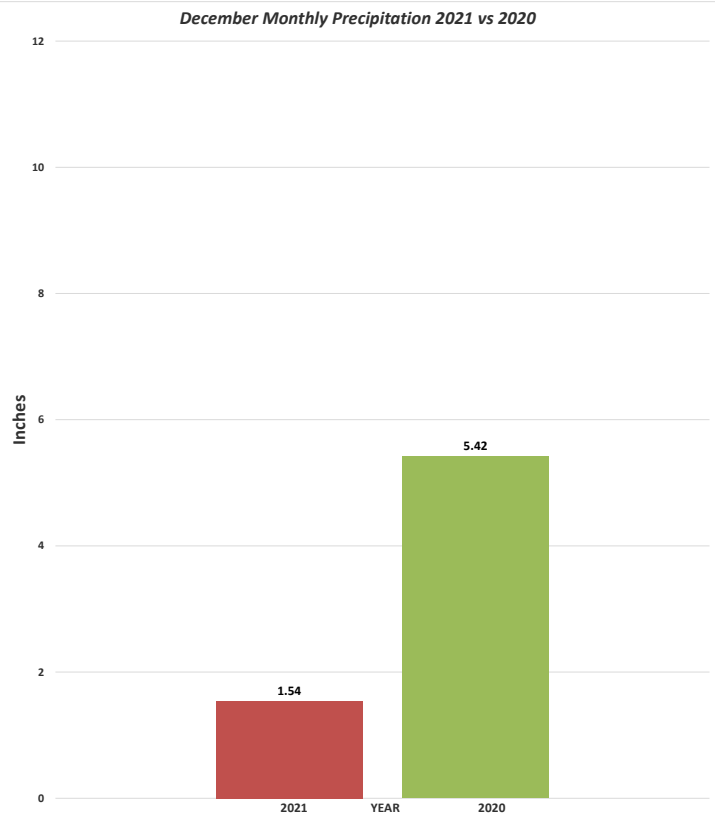
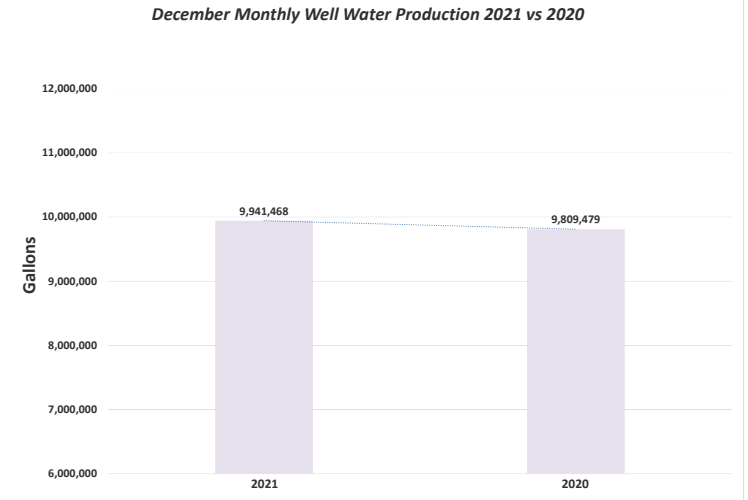
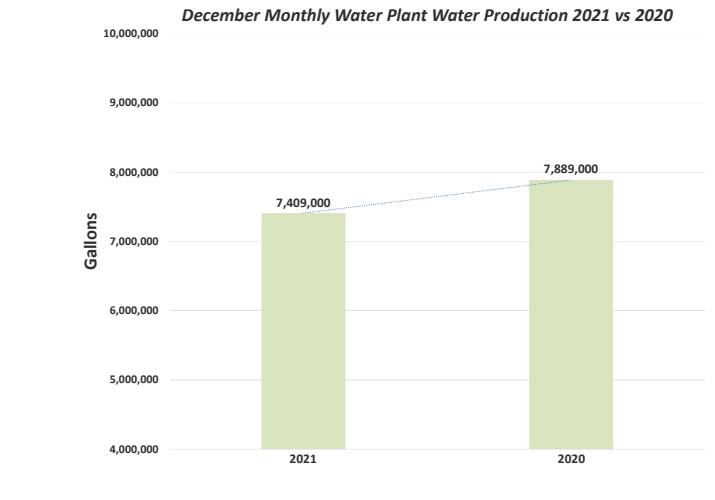
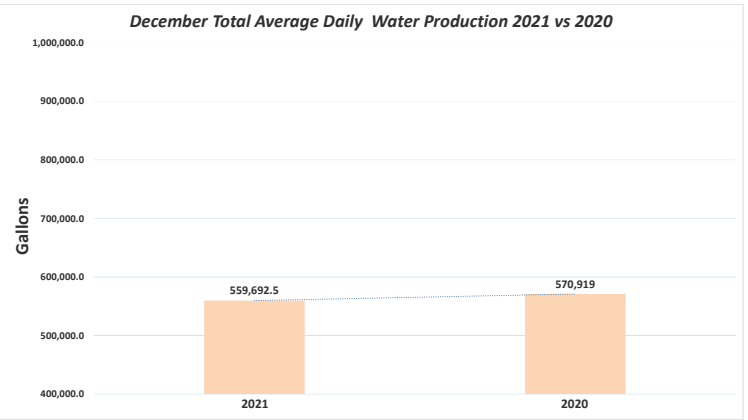
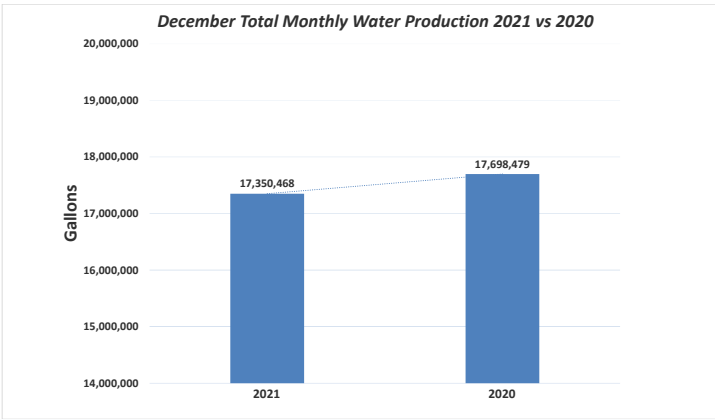
NPDES Discharge Monitoring Report due 01/10/2022 was submitted hard copy on 01/04/2022.
VDH ODW Monthly Operating Report due 01/10/2022 was submitted electronically on 01/10/2022.
Four Weekly Water Production Reports were completed.

**WATER TREATMENT PLANT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2020
PREPARED: JANUARY 2021**

WATER	MONTH	UNITS	AVG./DAY	UNITS
ALUMINUM SULFATE	1,651.3	lbs.	53.3	lbs.
POLYMER				
METAPHOSPHATE	106.8	lbs.	3.4	lbs.
SODA ASH	1,661.1	lbs.	53.6	lbs.
FLUORIDE (WTP & WELLS)	170.9	lbs.	5.5	lbs.
POTASSIUM PERMANGANATE	38.0	lbs.	1.2	lbs.
CHLORINE (HYPOCHLORITE @ WTP)	268.1	lbs.	8.6	lbs.
CHLORINE RESIDUAL (TANK)			1.9	mg/L
AVERAGE PH (FINISHED)			7.6	SU
BULK WATER SALES	-	gals.	0	gals.
INLINE METER, COOPER SPRINGS	3,858,966	gals.	124,483	gals.
JEFFRIES WELL	522,300	gals.	16,848	gals.
WATER PLANT GALLONS	7,889,000	gals.	254,484	gals.
MARSH WELL	1,812,100	gals.	58,455	gals.
MOUNTAIN VIEW WELL	164,451	gals.	5,305	gals.
MAIN STREET VILLAGES WELLS (MS-1 & VC)	2,456,084	gals.	79,229	gals.
CORNWELL #2 WELL	1,720,126	gals.	55,488	gals.
FORBES WELL	1,242,918	gals.	40,094	gals.
KANE WELLS #1 AND #2	2,413,800	gals.	77,865	gals.
TOTAL WATER FLOW	17,698,479	gals.	570,919	gals.

RESERVOIR LEVELS:	1-Dec-2020	31-Dec-2020
FRONT LAKE:	5.40'	5.42'
BACK LAKE	4.40'	5.12'
RAINFALL:	5.42"	

**Water Well Production Facilities
December 2022 vs 2021 Comparisons**



**WATER RECLAMATION FACILITY
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: December 2021
PREPARED: January 2022**

**WATER RECLAMATION FACILITY
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: December 2020
PREPARED: January 2021**

MEASURE	MONTH	AVG./DAY
INFLUENT FLOW	15,298,600 GAL	493,500 GAL
EFFLUENT FLOW	16,518,600 GAL	532,900 GAL
MAXIMUM DAY INFLUENT	529,900 GAL	
FERRIC CHLORIDE	2,621 GAL	85 GAL
CITRIC ACID	- GAL	- GAL
SODIUM HYPOCHLORITE	200 GAL	22 GAL
METHANOL-Micro C 3000	515 GAL	17 GAL
RAIN	0.39 IN.	0.01 IN.

MEASURE	MONTH	AVG./DAY
INFLUENT FLOW	25,495,800 GAL	822,400 GAL
EFFLUENT FLOW	24,234,600 GAL	781,800 GAL
MAXIMUM DAY INFLUENT	1,805,300 GAL	
FERRIC CHLORIDE	3,053 GAL	98 GAL
CITRIC ACID	143 GAL	72 GAL
SODIUM HYPOCHLORITE	250 GAL	23 GAL
METHANOL	1,080 GAL	35 GAL
RAIN	6.00 IN.	0.18 IN.

MONTHLY TOTAL NUTRIENT DISCHARGE

TOTAL NITROGEN	146 LBS.
TOTAL NITROGEN YTD	877 LBS.
AVG. DAILY NITROGEN	1.07 MG/L
VPDES NITROGEN LIMIT	4.0 MG/L
TOTAL PHOSPHORUS	36 LBS.
TOTAL PHOSPHORUS YTD	388 LBS.
AVG. PHOSPHORUS DAILY	0.27 MG/L
VPDES PHOSPHORUS LIMIT	0.3 MG/L

MONTHLY TOTAL NUTRIENT DISCHARGE

TOTAL NITROGEN	57 LBS.
TOTAL NITROGEN YTD	988 LBS.
AVG. DAILY NITROGEN	0.28 MG/L
VPDES NITROGEN LIMIT	4.0 MG/L
TOTAL PHOSPHORUS	21 LBS.
TOTAL PHOSPHORUS YTD	366 LBS.
AVG. PHOSPHORUS DAILY	0.11 MG/L
VPDES PHOSPHORUS LIMIT	0.3 MG/L

ACCOMPLISHMENTS

All Staff received training on (EMS) Hazardous Substanct Release Reporting (Plant Process), (Safety) storm water Pollution Prevention, (LAB)Sample schedule review and 24 hour time format changes.
Submitted VDEQ discharge monitoring report, Virginia's nutrient report .

NIA

No information available at this time.

Basham Simms Water Reclamation Facility 2021 vs 2020 Comparisons

