

SANITARY OPERATIONS REPORT

August 11, 2022

Construction Projects

- Brittney Avenue Subdivision, ie Engineering.
 - Project utilities work delayed until next year.
- Shawn Bateson Development, MIDEA Engineering.
 - Construction delayed until next Spring.
- Vanacker Depriest development, line extension, ie Engineering.
 - Pre-Con meeting planned for September.
- ODOT Hwy 42/99 Access Turnout project.
 - Delayed.

Collection System

- Manhole inspections project, underway, 'L' Basin.
- Temporary TV trailer.
 - 'N' Basin, flushing and CCTV Complete.
 - Starting 'L' Basin.
 - Permanent TV trailer delivered, we will start fitting and tooling after cleaning/inspecting this year is complete.
- Cross training with water/sanitary crews, underway.
- Camel water pump crank shaft is bad and is being rebuilt.
 - Camel parts have been delivered, pump is being rebuilt, hopefully done this week.
- Flushing is being completed with the VAC-CON while Camel is down.
 - VAC-CON water pump heads covers will be rebuilt when Camel is operational.

G4 and Pump Stations

- Pump Stations ran well, with typical operation and maintenance.
- Screentec demo trailer will be at the sanitary shop at 10AM on the 17th of August.
 - This is a product that has been considered for an upgrade to the G4 wet pit.

Wastewater Treatment Plant and Properties

- Krohn property
 - All of the property has been cleaned up, the crew did a great job.
 - sewer lateral had roots, capped and abandoned at clean pipe.

Meetings and Conferences

- Matt and I attended the DUCC meeting.

Lateral Inspections

- 4 Inspections.
 - 4345 Carnes, full replacement.
 - 220 and 206 Ervin, remodel and root repairs.
 - 550 Brady, new connection.

If you have any questions, feel free to contact me at 541-817-5100

Submitted by, Shannon L. Miller

Winston-Green Regional Wastewater Treatment Plant

Week of July 1st

- Began Hauling Biosolids
- Digester Recirculation Pump plugged
 - This in turn caused the pump to become severely air locked
 - The Air Locked pump resulted in extra staff coming in Saturday and Sunday
- Backwash Pump Number 1 quit working
 - A blown fuse was found to be the problem
- Effluent Filter # 2 was unresponsive. A quick power cycle of the actuators fixed the issue
- Monday Call Out due to Pumps becoming plugged/ air locked
- Tuesday Call Out Due to GT pump failure
 - Failure was a result of a fault in the Variable Frequency Drive
- Wednesday Call out due to a worn belt on the mixing pump
- Sludge Hauling truck starter button broken. Faulty wiring was found
- New Bobcat threw fault codes and will currently only idle
 - Bobcat has been called and a warranty ticket started
- Brush hog cutting done on lower field in preparation for hauling later in the summer
- Met with Cody who leases the GAWSA fields, we mapped out our hauling plan for the summer and he is putting up hot fence for the sheep to accommodate a haul road
- Brush Hog hydraulic motor failure
 - It is currently operational but has difficulty cutting any heavy grass or brush
 - A replacement motor has been ordered
- Mixing pump # 2 belt replaced
- Mixing Pump #2 o-ring seal failure, unfortunately this cannot be repaired without a complete overhaul. A temporary fix of RTV has been done until Digester # 2 is offline
- Primary # 1 offline and drained for the summer
- Secondary #3 offline and is draining
 - Rebuild it services will be onsite the week of July 11th to replace one of the drives under warranty
- Air Conditioning failure in Chlorine Building resulting in chlorine generation system A faulting
 - Staff is looking into air conditioning options
- Backwash Pump #2 Failure from a blown fuse
 - It appears the fuses on both backwash pump are unrelated just a coincidence
- Air Conditioning Failure in digester building electrical room
- The backwash pumps not operating as they should because of the blown fuses resulted in the effluent filters becoming extremely dirty. This has meant that staff has to take the whole day performing repeated backwashes and air scours
- Broken dichlorination line at pump. Break was fixed with parts on hand

Week of July 8th

- Continued to haul sludge once fields dried out from the rain
- The rain pushed the drying beds back by a week
- New bobcat was found to have a loose connection from the factory causing all of our issues
- Gearbox on brush cat mower for the bobcat rebuilt
 - We are still waiting on receiving a replacement hydraulic motor
- Thomas came by to learn more about our system
- Cattle Roundup
- Clean Filters Repeatedly
- Repaired Chlorine Leak
- Repaired broken water line @ headworks

Week of July 15th

- Hauled Sludge to Field # 3 of the plant
- Picked up Drying Beds
- Emptied Clarifier # 1 of stored sludge
- Replaced hydraulic motor of bobcat Brush hog
- Cut Field # 1 of berry bushes and grass
 - This was in preparation to smooth out field so that we can haul to it next year
- Re-Build It services onsite to replace a gearbox on secondary clarifier # 3
 - This was a warranty item and at no cost to the plant
- DMR done and submitted
- Secondary Clarifier # 4 offline and draining

Week of July 22nd

- Cleaned Wet Well
- Continued to brush cut field #1
- Picked up and filled multiple drying beds
- Hauled Bio-solids to field # 5
- Hauled dried biosolids to the neighbor's field
- Process Change to try and push our sludge younger
- Repaired trim piece on Bobcat S630
- Replaced hydraulic fluid on Bobcat S630
- Thomas onsite to expand his wastewater knowledge

Week of July 29th

- Cleaned Wet Well
- Continued to brush cut field #1
- Picked up and filled multiple drying beds
- Hauled Bio-solids to field # 5
- Boiler technician onsite to adjust air/ fuel ratio on both boilers
- Clean Wet Well
- Finished Hauling Biosolids to field # 2
- Pressure Washed Aeration Basin

Winston- Green WWTF Monthly Numbers

July 2022

General

1.) Plant Influent Flow (MG	<u>2022</u>		<u>2021</u>	
<i>Winston</i>	18.19	50%	16.17	47%
<i>Green</i>	18.56	50%	18.21	53%
<i>Rainfall</i>	0.50		0.00	
<i>Chlorine (Gallons)</i>	19,636		11,572	
2.) Leachate Total	489,500		33,000	

Bio-Solids

- 1.) Drying beds
167,520 Gallons
- 2.) Land Application
261,000 Gallons

FLOW ALLOCATION CHART

MONTH	WINSTON MG	GREEN MG	LANDERS LN. MG	TOTAL MG	RAINFALL
Jan.22	38.71	30.97	0.956	70.63	3.29
Feb.22	18.32	19.47	0.445	38.24	0.85
Mar.22	28.65	28.44	0.723	57.81	3.07
Apr.22	36.50	29.80	0.808	67.11	5.16
May.22	29.32	24.22	0.526	54.07	2.66
June.22	27.72	22.73	0.520	50.96	3.92
July.22	18.19	18.56	0.392	37.14	0.50
Aug.21	15.86	18.09	0.388	34.33	0.00
Sept.21	16.41	18.63	0.501	35.54	2.85
Oct.21	19.05	22.33	0.570	41.96	3.64
Nov. 21	21.15	22.09	0.595	43.83	2.40
Dec.21	36.70	34.01	0.964	71.68	6.78
TOTAL	306.59	289.33	7.388	603.30	35.12
GREEN + LANDERS		296.71			
APPORTIONMENT	50.82%	49.18%			
			100%		

WINSTON-GREEN WWTF

July 2022

SYSTEM CLASSIFICATION: IV PERMIT # 100554
 COUNTY: DOUGLAS

POPULATION: 10000

TYPE: RBC / ACTIVATED SLUDGE

FILE # 98400

D A T E	TOTAL FLOW MGD	INF PH	INF CBOD mg/l	INF SS mg/l	NH3 N EFF	TKN EFF	NO2 EFF	NO3 EFF	TOTAL P EFF	EFF PH	EFF TEMP MAX	EFF CBOD mg/l	% REM CBOD	LBS CBOD DIS	EFF SS mg/l	% REM SS	LBS DIS SS	CL2 RES mg/l	CL2 USED GAL.	ECOLI COL	BIOSOLIDS			
																					LAND gallons	DRYING BEDS gallons	RAIN FALL inches	
1	1.296	7.1	189	385						6.7	21.4	4.4	98%	48	1.2	100%	13	0.04	705		22,500			
2	1.312	7.3								6.7	21.4							0.04	685					
3	1.270	7.3								6.9	21.4							0.05	632					
4	1.179	7.3								6.8	21.6							0.06	635	18.7				0.03
5	1.417	7.1	203	412	0.10	4.05	0.06	21.2	3.7	6.6	21.7	4.2	98%	50	2.0	100%	24	0.06	633	62.9				0.37
6	1.400	7.1	193	387	1.49					6.4	21.8	5.6	97%	65	4.0	99%	47	0.05	630					0.10
7	1.397	7.4								6.7	21.9							0.03	625					
8	1.215	6.9	224	614						6.5	22.1	4.0	98%	41	0.8	100%	8	0.04	723			22,500		
9	1.156	7.3								6.7	22.1							0.04	699					
10	1.253	7.4								7.0	22.3							0.05	705					
11	1.193	7.6	230	541	0.23	4.61	0.11	21.3	3.3	6.4	22.8	4.2	98%	42	1.2	100%	12	0.05	707	91.0	18,000	24,850		
12	1.188	7.2								6.5	23.5							0.03	698	5.2				37,370
13	1.125	7.1	234	501	0.19					6.7	22.9	5.2	98%	49	2.2	100%	21	0.05	696			22,500	11,840	
14	1.112	7.2								6.7	22.9							0.04	691			22,500		
15	1.095	7.4								6.8	22.9							0.03	692			9,000	15,750	
16	1.073	7.2								6.4	22.8							0.04	687					
17	1.154	7.6								6.8	22.9							0.04	685	1.0				14,350
18	1.141	7.1	217	503	1.98	9.71	0.28	18.1	2.9	6.6	23.1	2.7	99%	26	2.2	100%	21	0.06	693	<1	18,000			
19	1.142	7.4								7.0	23.4							0.03	559			9,000	39,860	
20	1.125	7.1	205	523	0.33					6.7	23.7	5.1	98%	48	3.6	99%	34	0.04	541			18,000	13,000	
21	1.153	7.3								6.8	23.5							0.06	539			18,000		
22	1.150	7.3	75	453	0.29					6.8	23.3	4.7	94%	45	4.4	99%	42	0.02	541			13,500		
23	1.159	7.7								7.0	23.3							0.05	536					
24	1.180	7.7								7.2	23.4							0.06	542	88.9				
25	1.155	7.1	181	445	0.41	4.60	0.18	18.0	4.2	6.7	23.9	4.8	97%	46	4.0	99%	39	0.05	551			18,000		
26	1.155	7.4								6.8	24.2							0.06	571			18,000		
27	1.112	6.9	188	382	0.23					6.8	24.3	4.8	97%	45	2.0	99%	19	0.04	605			18,000		
28	1.136	7.4								6.8	24.6							0.06	612	<1		9,000		
29	1.092	7.1	228	435						6.8	25.0	3.8	98%	35	1.8	100%	16	0.04	612			4,500		
30	1.062	7.5								6.7	24.8							0.05	597					
31	1.156	7.3								7.0	24.3							0.06	609					10,500
TOT	36.75													538			294		19,636			261,000	167,520	0.50
MAX	1.417	7.7	234	614	1.98	9.71	0.28	21.3	4.2	7.2	25.0	5.6	99%	65	4.4	100%	47	0.06	723	91.0	22,500	39,860	0.37	
MIN	1.062	6.9	75	382	0.10	4.05	0.06	18.0	2.9	6.4	21.4	2.7	94%	26	0.8	99%	8	0.02	536	<1	4,500	10,500	0.03	
AVG	1.186	7.3	197	465	0.58	5.74	0.16	19.7	3.5	6.7	23.0	4.5	98%	45	2.5	99%	25	0.05	633	7.3	16,313	20,940	0.17	

LBS AVG

EXCESS THERMAL LOAD WEEKLY AVG. Mkcals/day	EFF TEMP © WEEKLY AVG.
3	18.6
10	21.2
17	23.1
24	26.9

I certify that I am familiar with the information contained in this report and that to the best of my knowledge such information is true, complete and accurate.

Christopher W. Sherlock
 SUPERINTENDENT T IV

Leachate Load Tickets -

<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/1 7:39 AM 340 8.33	7/2 6:47 AM 400 8.33	7/3 9:30 AM 434 8.29
7/1 9:20 AM 340 8.31	7/2 10:00 AM 400 8.28	7/3 1:30 PM 434 8.17
7/1 10:35 AM 340 8.31	7/2 11:20 AM 400 8.28	7/3 3:00 PM 434 8.17
7/1 1:00 PM 340 8.26		7/3 4:00 PM 434 8.16
7/1 3:05 PM 340 8.15		
Total Gallons: 27,500 5	Total Gallons: 16,500 3	Total Gallons: 22,000 4
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/4 6:45 AM 438 3.89	7/5 7:43 AM 416 8.34	7/6 7:44 AM 402 8.28
7/4 9:06 AM 438 8.30	7/5 9:00 AM 416 8.28	7/6 8:45 AM 402 8.24
7/4 10:15 PM 438 8.26	7/5 10:05 AM 444 8.26	7/6 9:45 AM 402 8.23
7/4 2:25 PM 438 8.13	7/5 11:20 AM 444 8.23	7/6 10:43 AM 402 8.21
Total Gallons: 22,000 4	Total Gallons: 22,000 4	Total Gallons: 22,000 4
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/7 7:40 AM 392 8.30	7/8 7:00 AM 412 8.34	7/9 6:41 AM 432 8.39
7/7 8:37 AM 390 8.27	7/8 8:00 AM 412 8.30	7/9 8:06 AM 432 8.34
7/7 9:38 AM 390 8.26	7/8 9:00 AM 412 8.30	7/9 9:25 AM 432 8.29
		7/9 10:44 AM 432 8.27
Total Gallons: 16,500 3	Total Gallons: 16,500 3	Total Gallons: 22,000 4
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/10 8:10 AM 308 8.43	7/11 11:50 AM 440 8.25	7/12 7:40 AM 446 8.34
7/10 9:43 AM 308 8.32	7/11 1:01 PM 428 8.19	7/12 8:45 AM 446 8.31
7/10 10:55 AM 308 8.29	7/11 2:10 PM 440 8.15	
7/10 12:04 PM 308 8.25		
7/10 1:50 PM 308 8.16		
Total Gallons: 27,500 5	Total Gallons: 16,500 3	Total Gallons: 11,000 2
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/15 6:56 AM 432 8.39	7/16 6:58 AM 490 8.45	7/17 7:00 AM 434 8.36
7/15 8:31 AM 432 8.37	7/16 8:37 AM 490 8.39	7/17 8:30 AM 434 8.39
	7/16 9:50 AM 490 8.36	7/17 9:30 AM 434 8.38
	7/16 11:08 AM 490 8.36	7/17 10:00 AM 434 8.35
	7/16 12:22 PM 490 8.33	
Total Gallons: 11,000 2	Total Gallons: 27,500 5	Total Gallons: 22,000 4
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/18 9:00 AM 426 8.39	7/19 10:00 AM 494 8.36	7/20 6:50 AM 528 8.44
7/18 10:02 AM 426 8.34	7/19 11:40 AM 494 8.27	7/20 8:25 AM 528 8.40
Total Gallons: 11,000 2	Total Gallons: 11,000 2	Total Gallons: 11,000 2
<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>	<u>Date</u> <u>Pick up</u> <u>mg/l</u> <u>PH</u>
7/21 7:00 AM 424 8.48	7/22 8:49 AM 468 8.45	7/23 7:04 AM 514 8.44
7/21 8:58 AM 424 8.45	7/22 10:30 AM 468 8.40	7/23 8:45 AM 514 8.38
7/21 3:35 PM 424 8.20		7/23 10:08 AM 514 8.39
Total Gallons: 16,500 3	Total Gallons: 11,000 2	Total Gallons: 16,500 3

Leachate Load Tickets -

<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>
7/24	7:00 AM	604	8.40	7/25	9:45 AM	504	8.38	7/26	12:45 PM	492	8.25
7/24	8:30 AM	604	8.37	7/25	11:45 AM	504	8.28	7/26	1:58 PM	492	8.20
7/24	10:00 AM	604	8.35	7/25	1:28 PM	504	8.22				

Total Gallons: 16,500 3 Total Gallons: 16,500 3 Total Gallons: 11,000 2

<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>
7/27	10:04 AM	404	8.41	7/28	8:27 AM	492	8.42	7/29	7:46 AM	522	8.44
7/27	11:12 AM	502	8.35	7/28	9:40 AM	488	8.37	7/29	10:46 AM	522	8.34
7/27	12:15 PM	502	8.32								

Total Gallons: 16,500 3 Total Gallons: 11,000 2 Total Gallons: 11,000 2

<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>	<u>Date</u>	<u>Pick up</u>	<u>mg/l</u>	<u>PH</u>
7/30	8:03 AM	574	8.44	7/31	7:30 AM	454	8.40				
7/30	10:30 AM	574	8.39	7/31	8:30 AM	454	8.41				
				7/31	10:00 AM	454	8.40				

Total Gallons: 11,000 2 Total Gallons: 16,500 3 Total Gallons: 0 0

TOTAL TICKETS: 89
TOTAL GALLONS/MONTH: 489,500
 \$9,790