

ONWASA

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ONWASA Wastewater Facilities Annual Report 2014

The Onslow Water and Sewer Authority (ONWASA) is required by the North Carolina Clean Water act of 1999 to produce this annual report on the performance of each Publicly Operated Treatment Works (POTW) and Collection System operated and maintained by ONWASA. This report is available for public review via Internet, the ONWASA Office and Member Governments.

ONWASA is pleased to present to you this year's Wastewater Facilities Annual Report. This report is a summary of last year's wastewater facilities performance. Included are monthly descriptions of each facilities activity. Our constant goal through wastewater treatment is to protect public health and safety by minimizing the risk of further contamination to surface and ground waters, to protect the quality of surface and ground waters so they will continue to be available as a drinking water source for future generations and to prevent and abate public health hazards. We want you to understand the effort we make to continually improve the wastewater treatment process and protect our water resources. We are committed to providing you with this information, because informed customers provide support in our continuing efforts.

ONWASA manages 6 treatment facilities and 8 collection systems. The facilities are as follows: The Richlands Facility, The Holly Ridge Facility, The Kenwood Facility, The Swansboro Facility, The Webb Apt. Facility and the Hickory Grove Facility for collection and treatment Springdale and Piney Green are only collection systems operated by ONWASA. This report contains a description and snap shot of the monthly activities of each plant and the collection system operated by ONWASA.

Should you have any questions regarding this report you may contact ONWASA at:

ONWASA
228 Georgetown Rd.
Jacksonville, NC 28540
onwasa.com

Swansboro: Summary

Swansboro Wastewater Treatment Facility is located at 199 Williams Street and currently has three employees. The plant is designed to treat 0.6 Million Gallons per Day (mgd) and is rated a Grade 3 facility. The average daily flow received at the plant in 2014 was 0.34 mgd, which is approximately 57 % of the design flow at the wastewater plant. The facility treated a total of 124,190,244 gallons during the year, an average of 10,349,187 gallons per month.

General Information

Facility Name: Swansboro Wastewater Treatment Plant

Facility Type/ Operation: Activated Sludge Extended Air

Responsible Entity: ONWASA

Facility Address: 199 Williams Road Swansboro, NC 28584

Facility Phone: 910-326-4819

Operator in Responsible Charge (ORC): Allen Rhue

ORC Type / Grade License: WW4, SI, CS2, SS, PC1

Applicable Facility Permit Numbers: WQ0023261

Description of Facility: The Wastewater Facility is located in Swansboro on Williams Road where it was constructed in 1979. A Plant upgrade was completed in July of 2007 and the capacity was increased to .6 MGD. The current plant is equipped with (1) aerated equalization basin, Automatic bar screen and grit removal system, (2) Oxidation ditches, (3) secondary clarifiers, (1) aerobic digester, (1) fine bubble sludge holding tank, (1) return sludge pump station, (1) sludge transfer station, (3) Motor control centers, (2) tertiary filters, (1) triple bank UV light system, (1) effluent pump station, (1) upset pond, and (4) low rate infiltration basins.

Swansboro Collection System

Collection System Name: Town of Swansboro Wastewater Collection System

Collection System Grade/ Type Operation: Grade 2/ Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Town of Swansboro located in the eastern part of Onslow County

Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

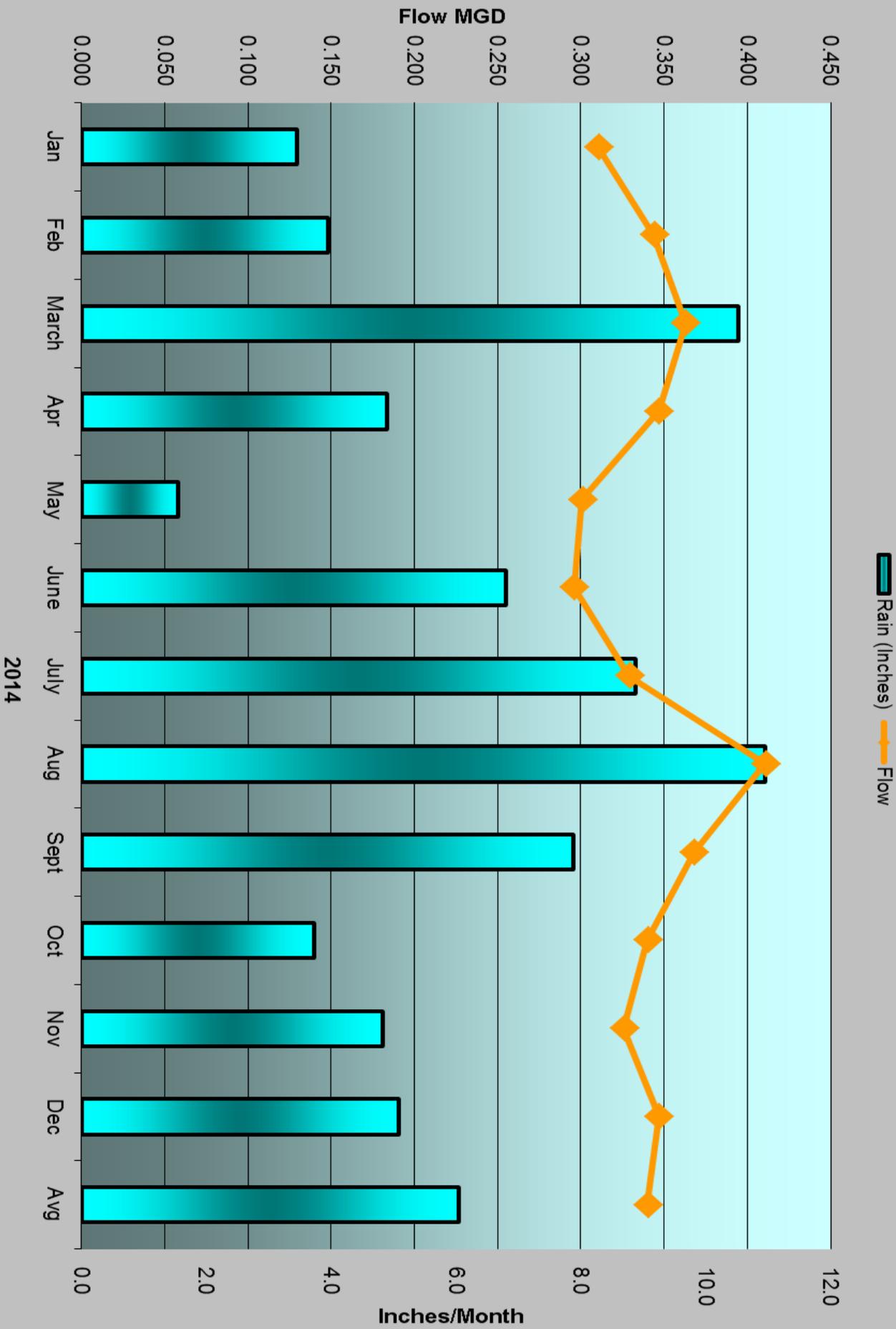
ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

2014
Swansboro WWTP
Annual WW Report

Jan.		
9,626,950	TOTAL GALLONS TREATED	
0.311	AVERAGE FLOW (MGD)	
0.394	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility failed the daily fecal, DWQ was notified that it may have been a contaminated sample bottle.
3.45	TOTAL INCHES RAIN FALL	
8,942,933	GALLONS APPLIED TO PONDS	
0.288	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
0	ACRES MOWED	
Feb.		
9,627,352	TOTAL GALLONS TREATED	
0.344	AVERAGE FLOW (MGD)	
0.451	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
3.95	TOTAL INCHES RAIN FALL	
9,173,819	GALLONS APPLIED TO PONDS	
0.328	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
5	ACRES MOWED	
Mar.		
11,254,560	TOTAL GALLONS TREATED	
0.363	AVERAGE FLOW (MGD)	
0.470	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility was having an issue with turbidity cause by failure of the DO meter in Oxidation ditch #1. After corrections were made a Nor'easter moved through the area. Mr. Tharrington was called in from the regional office and determined the problem to be young sludge.
10.52	TOTAL INCHES RAIN FALL	
10,897,812	GALLONS APPLIED TO PONDS	
0.352	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
5	ACRES MOWED	
Apr.		
10,419,141	TOTAL GALLONS TREATED	
0.347	AVERAGE FLOW (MGD)	
0.548	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	Failed daily BOD on 16 Apr 14, 16.8 mg/l, this was due to the DO and Turbidity issue that occurred in Apr 14. Daily limit is 15.0 mg/l.
4.9	TOTAL INCHES RAIN FALL	
10,114,030	GALLONS APPLIED TO PONDS	
0.337	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
2384	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
36	ACRES MOWED	
May		
9,337,230	TOTAL GALLONS TREATED	
0.301	AVERAGE FLOW (MGD)	
0.355	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
1.55	TOTAL INCHES RAIN FALL	
8,517,294	GALLONS APPLIED TO PONDS	
0.275	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
100	ACRES MOWED	
Jun.		
8,870,420	TOTAL GALLONS TREATED	
0.296	AVERAGE FLOW (MGD)	
0.371	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
6.8	TOTAL INCHES RAIN FALL	
8,257,142	GALLONS APPLIED TO PONDS	
0.275	AVERAGE FLOW (PERMIT FLOW 0.6 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
83	ACRES MOWED	

Swansboro WWTP



Holly Ridge: Summary

Holly Ridge Wastewater Treatment Plant (WWTP) is located at 286 N. Jenkins Street and is currently staffed by three plant operators. The plant has a design capacity of 0.261 million gallons per day (mgd). The average flow at the plant in 2014 was 0.233 mgd, which is 89.2 % of the permitted design flow of the wastewater plant. The facility treated a total of 85,004,753 gallons during the past year. The facility sprayed a total of 67,091,570 gals.

General Information

Facility Name: Holly Ridge WWTP and Wastewater Surface Irrigation

Facility Type/ Operation: Grade 2 WWTP and Surface Irrigation Facility

Responsible Entity: ONWASA

Facility Address: 286 N. Jenkins St. Holly Ridge, N.C. 28445 (WWTP)

220 Dolph Everett Rd. Holly Ridge, N.C. 28445 (Surface Irrigation Facility)

Facility Phone: 910 329-0951

Operator in Responsible Charge (ORC): Allen W. Rhue

ORC Type / Grade License: WW4, SI, CS2, SS, PC1

Applicable Facility Permit Numbers: WQ0019907

Description of Facility: The Holly Ridge WWTP is a 260,626 GPD Wastewater treatment facility consisting of headworks with manual bar screen and grit chamber, influent flow measurement with ultrasonic flow meter; a 1.82 (MG) treatment lagoon with three (3) aeration cells (cells 1&2 each have 2-25 HP aerators with anti-erosion baffles, cell 3 has 2-25 HP mixers with anti-erosion baffles), a 0.49 MG settling cell; an ultraviolet (UV) disinfection system; a 22,400 gallon aerobic sludge digester with a 2 HP aerator and 3 HP discharge pump; an effluent pump station with duplex 450 GPM pumps; and 17,900 ft. of 8 in. force main to Surface Irrigation Facility. The Surface Irrigation is a 240,179 GPD facility consisting of a 13.30 MG storage lagoon (51 days storage); ten(10) spray fields consisting of 93.42 wetted acres (789 total sprayheads); and an irrigation pump station with dual 700 GPM pumps and an effluent flow meter. The Holly Ridge WWTP and Surface Irrigation Facility is a Non-Discharge facility.

Holly Ridge Collection System

Collection System Name: Town of Holly Ridge Wastewater Collection System

Collection System Grade/ Type Operation: Grade 1/ Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Town of Holly Ridge located in the southeast part of Onslow County

Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

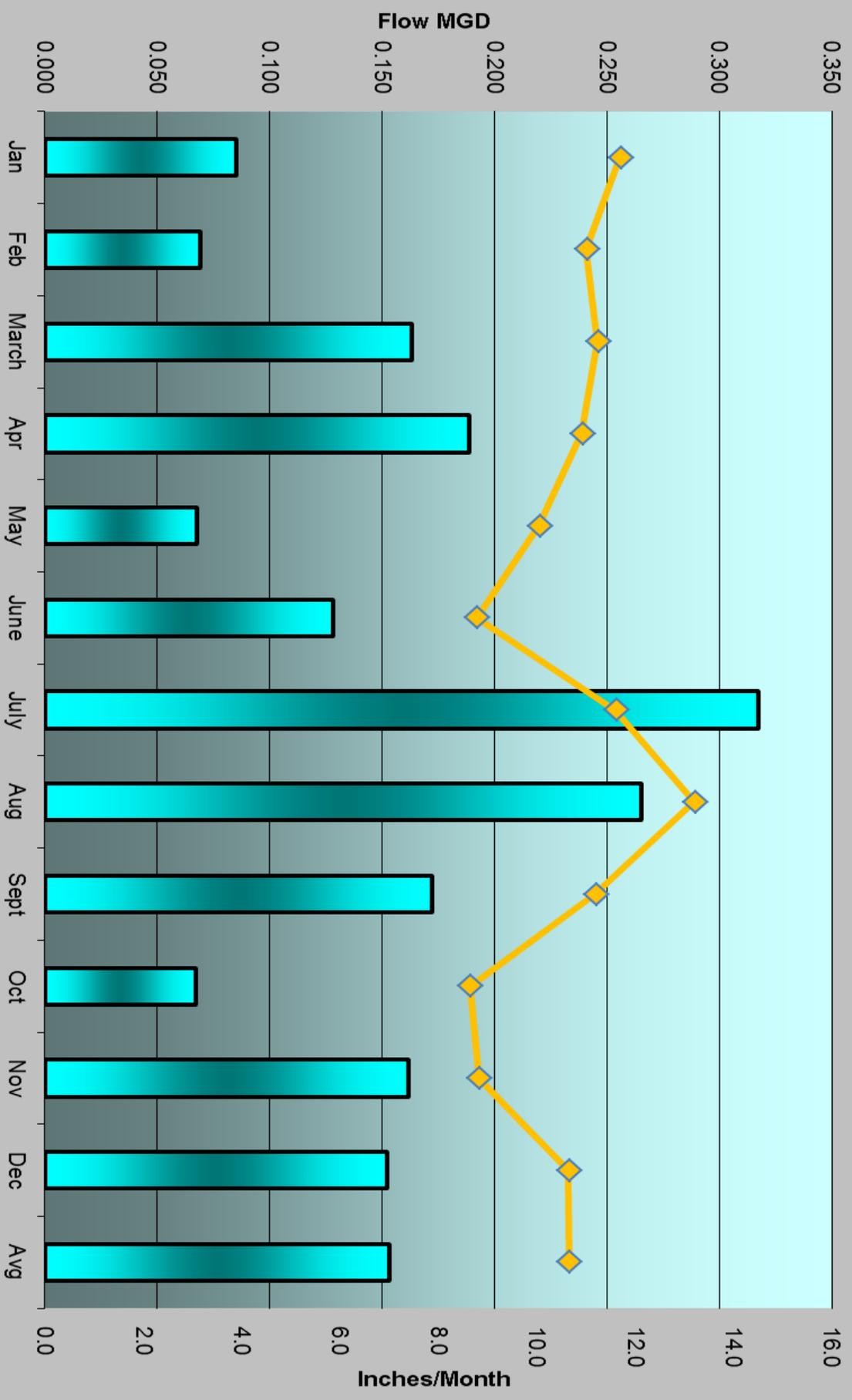
2014
Holly Ridge WWTP
Annual WW Report

Jan.		
7,936,000	TOTAL GALLONS TREATED	
0.256	AVERAGE FLOW (MGD)	
0.300	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
3.9	TOTAL INCHES RAIN FALL	
5,363,030	GALLONS SPRAYED	
0.173	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
0	ACRES MOWED	
Feb.		
6,734,000	TOTAL GALLONS TREATED	
0.241	AVERAGE FLOW (MGD)	
0.275	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (Explanation)	The collection system overflow was due to a ball of rags clogging the line. Approximately 120 gallons reached surface waters of a near by storm pond.
3.15	TOTAL INCHES RAIN FALL	
5,389,955	GALLONS SPRAYED	
0.192	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
5,865	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
YES	COLLECTION SYSTEM OVERFLOWS?	
0	ACRES MOWED	
Mar.		
7,636,000	TOTAL GALLONS TREATED	
0.246	AVERAGE FLOW (MGD)	
0.309	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
7.46	TOTAL INCHES RAIN FALL	
5,288,840	GALLONS SPRAYED	
0.171	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
615	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
0	ACRES MOWED	
Apr.		
7,158,990	TOTAL GALLONS TREATED	
0.239	AVERAGE FLOW (MGD)	
0.403	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	Plant was non-compliant due to the freeboard requirement of 2' was not maintained.
8.62	TOTAL INCHES RAIN FALL	
6,002,090	GALLONS SPRAYED	
0.200	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
4,180	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
69.13	ACRES MOWED	
May		
6,821,290	TOTAL GALLONS TREATED	
0.220	AVERAGE FLOW (MGD)	
0.226	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	Plant was non-compliant due to the freeboard requirement of 2' was not maintained.
3.09	TOTAL INCHES RAIN FALL	
6,338,995	GALLONS SPRAYED	
0.204	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
11,739	COLLECTION SYSTEM PIPE CLEANED	
591	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
258.21	ACRES MOWED	
Jun.		
5,746,010	TOTAL GALLONS TREATED	
0.192	AVERAGE FLOW (MGD)	
0.229	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
5.85	TOTAL INCHES RAIN FALL	
5,868,410	GALLONS SPRAYED	
0.196	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
226.39	ACRES MOWED	

Jul.				
7,871,800	TOTAL GALLONS TREATED			
0.254	AVERAGE FLOW (MGD)			
0.343	MAX DAY (MGD)			
YES	WWTP IN COMPLIANCE			
14.51	TOTAL INCHES RAIN FALL			
4,522,260	GALLONS SPRAYED			
0.146	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
0	COLLECTION SYSTEM PIPE CLEANED			
0	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
170	ACRES MOWED			
Aug.				
8,972,000	TOTAL GALLONS TREATED			
0.289	AVERAGE FLOW (MGD)			
0.289	MAX DAY (MGD)			
NO	WWTP IN COMPLIANCE (Explanation)			Plant was non-compliant due to the freeboard requirement of 2' was not maintained.
12.12	TOTAL INCHES RAIN FALL			
5,038,835	GALLONS SPRAYED			
0.163	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
11,163	COLLECTION SYSTEM PIPE CLEANED			
1,706	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
119.28	ACRES MOWED			
Sep.				
7,363,550	TOTAL GALLONS TREATED			
0.245	AVERAGE FLOW (MGD)			
0.343	MAX DAY (MGD)			
NO	WWTP IN COMPLIANCE (Explanation)			Plant was non-compliant due to the freeboard requirement of 2' was not maintained.
7.88	TOTAL INCHES RAIN FALL			
6,369,005	GALLONS SPRAYED			
0.212	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
0	COLLECTION SYSTEM PIPE CLEANED			
0	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
140.1	ACRES MOWED			
Oct.				
5,767,250	TOTAL GALLONS TREATED			
0.186	AVERAGE FLOW (MGD)			
0.233	MAX DAY (MGD)			
NO	WWTP IN COMPLIANCE (Explanation)			Plant was non-compliant due to the freeboard requirement of 2' was not maintained.
3.06	TOTAL INCHES RAIN FALL			
6,165,730	GALLONS SPRAYED			
0.199	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
4,270	COLLECTION SYSTEM PIPE CLEANED			
0	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
106.07	ACRES MOWED			
Nov.				
5,787,550	TOTAL GALLONS TREATED			
0.193	AVERAGE FLOW (MGD)			
0.298	MAX DAY (MGD)			
YES	WWTP IN COMPLIANCE			
7.4	TOTAL INCHES RAIN FALL			
4,688,840	GALLONS SPRAYED			
0.156	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
0	COLLECTION SYSTEM PIPE CLEANED			
0	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
0	ACRES MOWED			
Dec.				
7,210,313	TOTAL GALLONS TREATED			
0.233	AVERAGE FLOW (MGD)			
0.330	MAX DAY (MGD)			
YES	WWTP IN COMPLIANCE			
6.95	TOTAL INCHES RAIN FALL			
6,055,580	GALLONS SPRAYED			
0.195	AVERAGE FLOW (PERMIT FLOW 0.24 MGD)			
NO	OVERFLOW AT FACILITY?			
0	COLLECTION SYSTEM PIPE CLEANED			
0	COLLECTION SYSTEM PIPE VIDEOED			
NO	COLLECTION SYSTEM OVERFLOWS?			
0	ACRES MOWED			
85,004,753	Total Treated			
67,091,570	Total Spray			
0.233	Average MG/day treated	37,832.00		Total Footage Pipe Cleaned
0.184	Average MG/day sprayed	2297		Total Footage Pipe Videoed

Holly Ridge WWTP

Rain (Inches) Flow



2014

Richlands: Summary

Richlands Wastewater Treatment Facility is located at 203 Jimmy Powell Lane and is staffed by three operators. The plant is permitted to treat 0.250 million gallons per day (mgd). The average flow at the plant in 2014 was 0.198 mgd, which is 79.2 % of the permitted design flow of the wastewater plant. The facility treated a total of 72,009,052 gallons during the past year, which averages 6,000,754 gallons per month.

Richlands: General Information

Facility Name: Richlands WWTP
Facility Type/ Operation: Activated Sludge Extended Air
Responsible Entity: ONWASA
Facility Address: 203 Jimmy Powell Lane
Richlands, NC 28574
Facility Phone: (910) 937-7572
Operator in Responsible Charge (ORC): Mark Young
ORC Type / Grade License: WW3, CS2, SI, SS
Applicable Facility Permit Numbers: NC0023230

Description of Facility: The Richlands Wastewater Treatment Plant is a 0.25 mgd activated sludge treatment facility. The plant treats wastewater utilizing preliminary screening and grit removal, secondary treatment using an oxidation ditch and secondary clarifiers, tertiary effluent filtration, followed by chlorine disinfection, de-chlorination and post aeration prior to discharging effluent to Squires Run Creek.

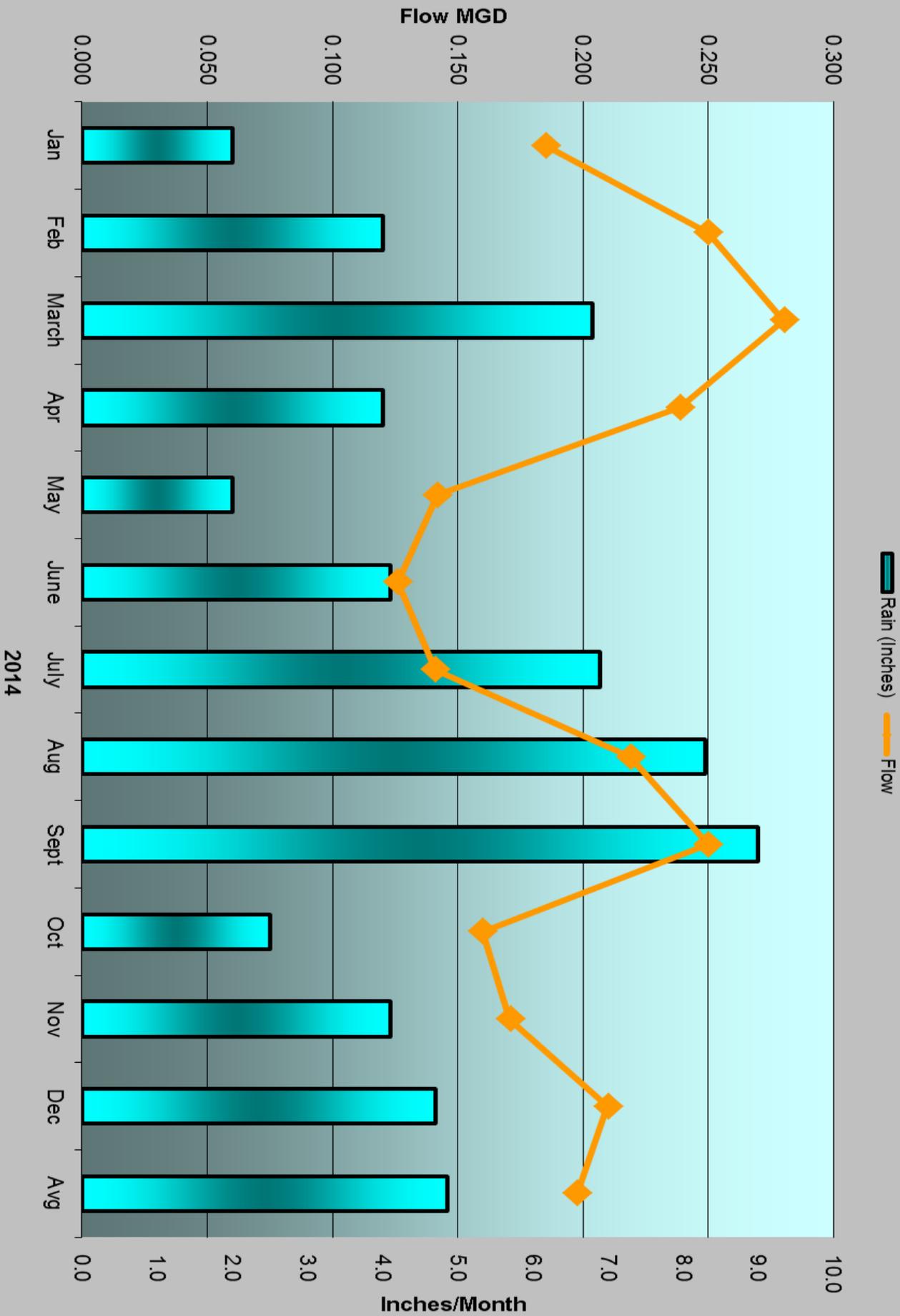
Richlands: Collection System

Collection System Name: Town of Richlands Wastewater Collection System
Collection System Grade/ Type Operation: Grade 2/ Domestic
Responsible Entity: Onslow Water and Sewer Authority (ONWASA)
Facility Address: Town of Richlands located in the northwest part of Onslow County
Contact Phone: 910-937-7509
Operator in Responsible Charge (ORC): Timothy V. Webb
ORC Type / Grade License: CS Grade 4 License # 987495
Applicable Collection System Permit Numbers: WQCS00249

2014
Richlands
Annual WW Report

Jan.		
5,732,159	TOTAL GALLONS TREATED	
0.185	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.296	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility was non compliant due to ultra low chlorine levels being exceeded.
2	TOTAL INCHES RAIN FALL	
No	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Feb.		
6,989,070	TOTAL GALLONS TREATED	
0.250	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.470	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility was non compliant due to the weekly limit of Fecal coliform and monthly flow average being exceeded.
4	TOTAL INCHES RAIN FALL	
YES	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Mar.		
8,687,829	TOTAL GALLONS TREATED	
0.280	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.571	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility was non compliant due to exceeding the monthly BOD and flow limit.
6.8	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
390	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Apr.		
7,162,000	TOTAL GALLONS TREATED	
0.239	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.466	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	The facility was non compliant due to exceeding the monthly BOD limit. The change to summer permit limits took effect this month and went from 10 mg/l to 5 mg/l. The plant average was 5.54 mg/l.
4	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
May		
4,411,910	TOTAL GALLONS TREATED	
0.142	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.218	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
2	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Jun.		
3,765,774	TOTAL GALLONS TREATED	
0.126	AVERAGE FLOW (MGD) (PERMIT FLOW 0.25 MGD)	
0.164	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (Explanation)	Exceeded permitted limits for BOD and NH3
4.1	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Richlands WWTP



Kenwood: Summary

Kenwood Wastewater Treatment Facility is located at 507 OCI Drive in Kenwood Subdivision off Blue Creek Road. The plant currently has two employees. The plant has a design capacity of 0.049 mgd. The average flow for 2014 was .026 mgd, which is 79.5 % of the design flow of the wastewater plant. The facility treated a total of 9,575,692 gallons during the year, which averages 797,974 gallons per month.

Kenwood: General Information

Facility Name: Kenwood Wastewater Treatment Plant

Facility Type/ Operation: Activated Sludge Extend Air

Responsible Entity: ONWASA

Facility Address: 501 OCI Dr.
Jacksonville, NC. 28540

Facility Phone: 910-455-0722

Operator in Responsible Charge (ORC): Mark Young

ORC Type / Grade License: WW3, CS2, SI, SS

Applicable Facility Permit Numbers: NC 0030813

Description of Facility: Wastewater Facility is located in the southwest area of Onslow County where it was constructed in 1976. The current plant is a .049 gallons per day, Treatment Facility. The Treatment process consist of, bar screens, flow equalization basin, 2 clarifiers, 2 sand filters, clearwell, effluent with gaseous chlorine and sodium bisulfite de-chlorination system.

Kenwood: Collection System

Collection System Name: Kenwood Subdivision

Collection System Grade/ Type Operation: Grade 1/ Domestic

Responsible Entity: Onslow Water and sewer Authority ONWASA

Facility Address: Southwest area of Onslow County

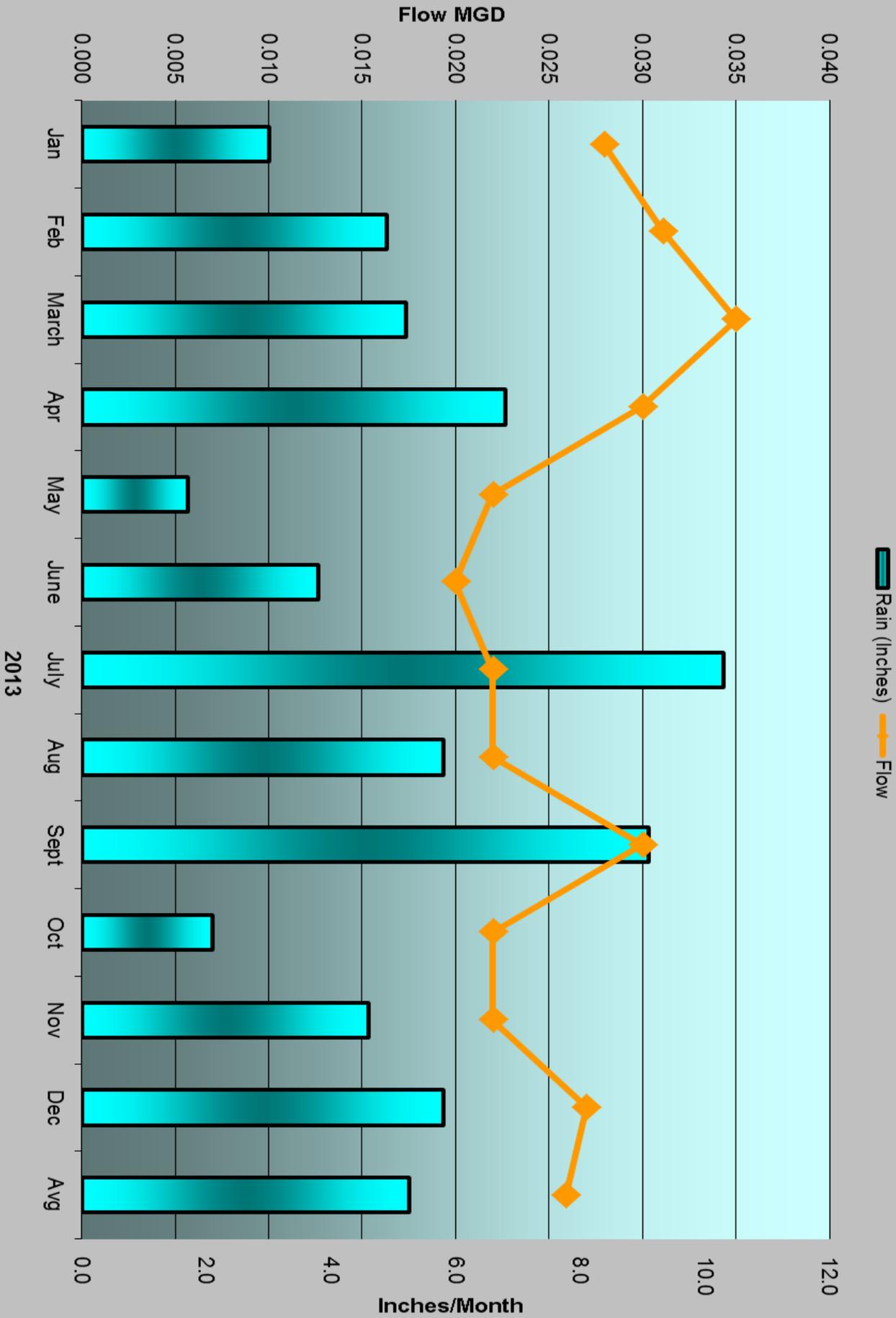
Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

Kenwood WWTP



Webb Apartments: Summary

The Webb Apartments Wastewater Treatment Facility is located at 1906 Piney Green Road, Northeast of Jacksonville in Onslow County. The plant is operated by the staff of the Swansboro WWTP. The system was acquired by ONWASA from the previous owner and operations under ONWASA management began in June 2012. The plant is designed to treat 0.025 Million Gallons per Day (mgd) and is rated a Grade 2 facility. The average daily flow received at the plant in 2014 was 0.007 mgd, which is 30.9% of the design flow at the wastewater plant. The facility treated a total of 2,581,590 gallons during the year, which averages 215,133 gallons per month.

Webb Apartments: General Information

Facility Name: Webb Apartments Wastewater Treatment Plant

Facility Type/ Operation: Activated Sludge Extended Air

Responsible Entity: ONWASA

Facility Address: 1906 Piney Green Road, Jacksonville, NC

Facility Phone: 910-937-7539 or 7574

Operator in Responsible Charge (ORC): Allen Rhue

ORC Type / Grade License: WW4, SI, CS2, SS, PC1

Applicable Facility Permit Numbers: NC0023825

Description of Facility: The Wastewater Facility is located northeast of Jacksonville on Piney Green Road. The plant is equipped with (1) Influent Pump Station, (1) Flow Equalization Basin, (1) Manual Bar Screen, (2) Aeration Basins, (1) Secondary Clarifier, (2) High Rate Filters, (1) Post Aeration Basin, (1) Aerobic Digester, (2) Dual Sludge Drying Beds, (1) Gaseous Chlorine System, and (1) Liquid De-chlorination System.

Webb Apartments: Collection System

Collection System Name: Webb Apartments Wastewater Collection System

Collection System Grade/ Type Operation: Grade 1/ Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Webb Apartments Subdivision east of the City of Jacksonville

Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

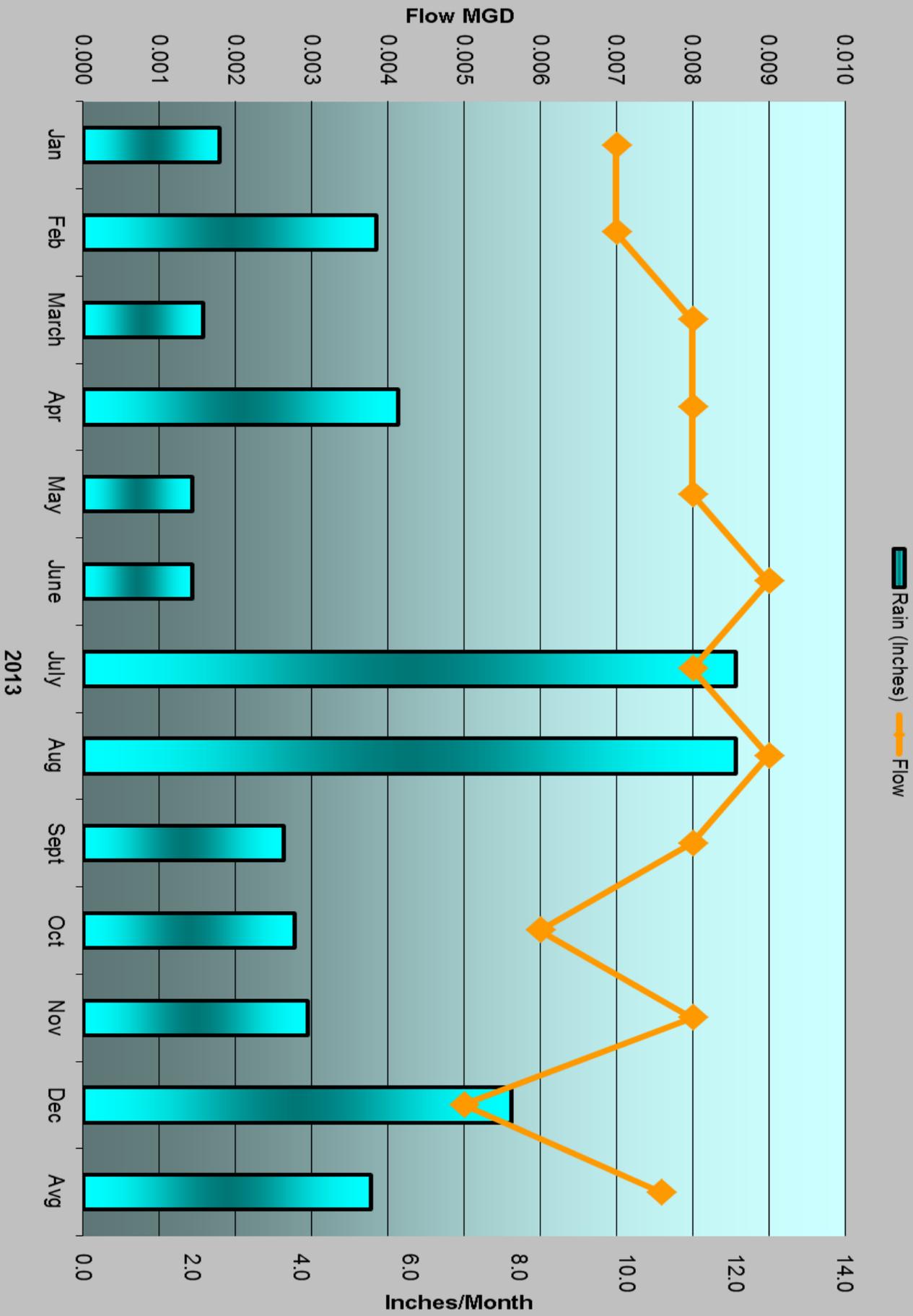
ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

2014
Webb Apts WWTP
Annual WW Report

Jan.		
203,000	TOTAL GALLONS TREATED	
0.007	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0.009	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
2.5	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Feb.		
193,050	TOTAL GALLONS TREATED	
0.007	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0.010	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
5.4	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Mar.		
244,050	TOTAL GALLONS TREATED	
0.008	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0.011	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
2.2	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Apr.		
249,380	TOTAL GALLONS TREATED	
0.008	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0.014	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
5.8	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
May		
238,520	TOTAL GALLONS TREATED	
0.008	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0.014	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
2	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Jun.		
189,460	TOTAL GALLONS TREATED	
0.006	AVERAGE FLOW (MGD) (PERMIT FLOW 0.025 MGD)	
0..9	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE	
2	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Webb Apts. WWTP



Hickory Grove: Summary

The Hickory Grove Wastewater Treatment Plant (WWTP) is located off Easy Street in the Hickory Grove Subdivision and is operated by the staff of the Swansboro WWTP. The plant is designed to treat 22,500 gallons per day (GPD). The average flow at the plant in 2013 was 0.01 million gallons per day (MGD), which is 45 % of the design flow at the wastewater plant. The facility treated a total of 3,517,400 gallons during the year which is approximately 293,116 gallons per month.

Hickory Grove: General Information

Facility Name: Hickory Grove WWTP
Facility Type/ Operation: Facultative Lagoon
Responsible Entity: ONWASA
Facility Address: Hickory Grove Subdivision
Facility Phone: 910-455-0722
Operator in Responsible Charge (ORC): Allen Rhue
ORC Type / Grade License: WW4, SI, CS2, SS, PC1
Applicable Facility Permit Numbers: NC0034991

Description of Facility: The facility is located off NCSR 1406 east of Jacksonville at the Hickory Grove Subdivision. The facility is rated to treat 0.0225 MGD or 22,500 gallons per day of wastewater. The system is comprised of a 2.9 acre lagoon, a tablet chlorine system and a chlorine contact chamber with de-chlorination. The plant discharges to the Little Northeast Creek, classified C-NSW waters in the White Oak River Basin.

Hickory Grove: Collection System

Collection System Name: Hickory Grove Collection System
Collection System Grade/ Type Operation Grade 1/ Domestic
Responsible Entity: Onslow Water and sewer Authority ONWASA
Facility Address: Hickory Grove Subdivision
Contact Phone: 910-937-7509
Operator in Responsible Charge (ORC): Timothy V. Webb
ORC Type / Grade License: CS Grade 4 License # 987495
Applicable Collection System Permit Numbers: WQCS00249

2014
Hickory Grove WWTP
Annual WW Report

Jan.		
293,100	TOTAL GALLONS TREATED	
0.009	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
0.009	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (If NO Explain ->)	
2.5	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Feb.		
306,600	TOTAL GALLONS TREATED	
0.011	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
0.011	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (If NO Explain ->)	
5.7	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Mar.		
264,800	TOTAL GALLONS TREATED	
0.009	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
0.009	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (If NO Explain ->)	
8	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Apr.		
240,500	TOTAL GALLONS TREATED	
0.008	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
0.008	MAX DAY (MGD)	
NO	WWTP IN COMPLIANCE (If NO Explain ->)	
4.2	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
May		
286,300	TOTAL GALLONS TREATED	
0.009	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
N/A	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (If NO Explain ->)	No Effluent flow reported on the DMR.
1.5	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	
Jun.		
306,100	TOTAL GALLONS TREATED	
0.010	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)	
0.010	MAX DAY (MGD)	
YES	WWTP IN COMPLIANCE (If NO Explain ->)	
2.65	TOTAL INCHES RAIN FALL	
NO	OVERFLOW AT FACILITY?	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Jul.	
314,900	TOTAL GALLONS TREATED
0.010	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.010	MAX DAY (MGD)
YES	WWTP IN COMPLIANCE (If NO Explain ->)
10.41	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
0	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

Aug.	
377,700	TOTAL GALLONS TREATED
0.012	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.012	MAX DAY (MGD)
YES	WWTP IN COMPLIANCE (If NO Explain ->)
7.8	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
0	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

Sep.	
293,800	TOTAL GALLONS TREATED
0.010	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.010	MAX DAY (MGD)
YES	WWTP IN COMPLIANCE (If NO Explain ->)
7.8	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
0	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

Oct.	
324,900	TOTAL GALLONS TREATED
0.010	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.010	MAX DAY (MGD)
Yes	WWTP IN COMPLIANCE (If NO Explain ->)
3.91	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
1,900	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

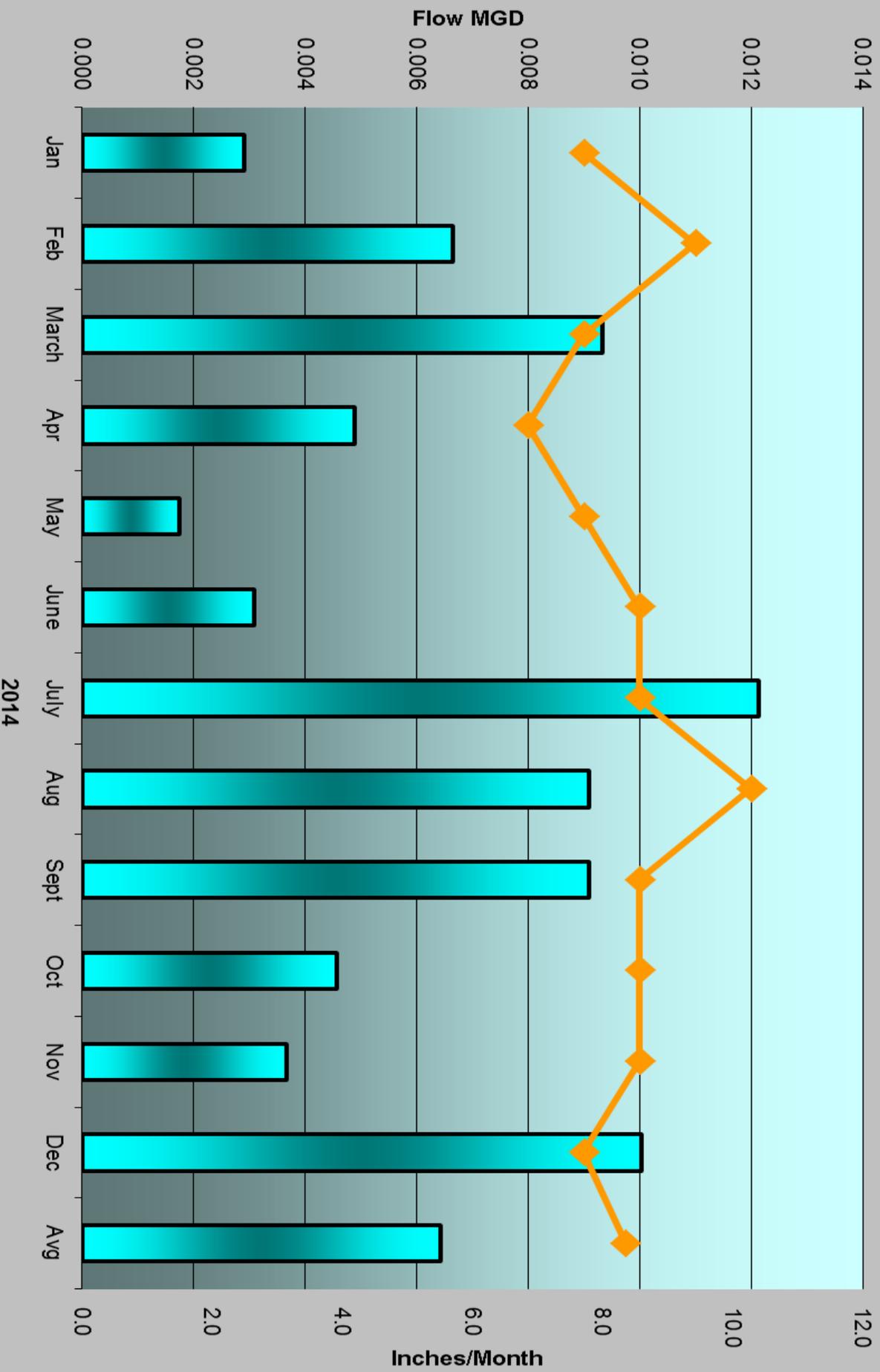
Nov.	
292,700	TOTAL GALLONS TREATED
0.010	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.010	MAX DAY (MGD)
YES	WWTP IN COMPLIANCE (If NO Explain ->)
3.14	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
0	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

Dec.	
288,000	TOTAL GALLONS TREATED
0.009	AVERAGE FLOW (MGD) (PERMIT FLOW 0.0225 MGD)
0.009	MAX DAY (MGD)
YES	WWTP IN COMPLIANCE (If NO Explain ->)
8.6	TOTAL INCHES RAIN FALL
NO	OVERFLOW AT FACILITY?
0	COLLECTION SYSTEM PIPE CLEANED
0	COLLECTION SYSTEM PIPE VIDEOED
NO	COLLECTION SYSTEM OVERFLOWS?

3,589,400	Total Treated
0.010	Average MG/Day
1,900	Total Footage Pipe Cleaned
0	Total Footage Pipe Videoed

Hickory Grove WWTP

Rain (Inches) Flow



Collection Systems

Collection System Name: Piney Green Wastewater Collection System

Collection System Grade/ Type Operation: Grade 1/ Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: East of the City of Jacksonville along Piney Green Corridor

Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

Description of Collection System: This system consist of fifty one thousand four hundred and forty nine feet (51,449') of gravity sewer ranging from eight inch (8") to fifteen inch (15"), sixty thousand three hundred and fifty-five feet (60,355') of force mains ranging from four inch (4") to six inch (24"). The system has a total of 8 pump stations that convey wastewater to the main station on Piney Green Rd. From there the flow is sent directly to the French Creek WWTP on base Camp Lejeune.

2014
Piney Green Collection System
Annual WW Report

Jan.		
6,487,974	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.209	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.332	MAX DAY (MGD)	
3.79	TOTAL INCHES RAIN FALL	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Feb.		
7,990,255	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.285	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.393	MAX DAY (MGD)	
3.2	TOTAL INCHES RAIN FALL	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

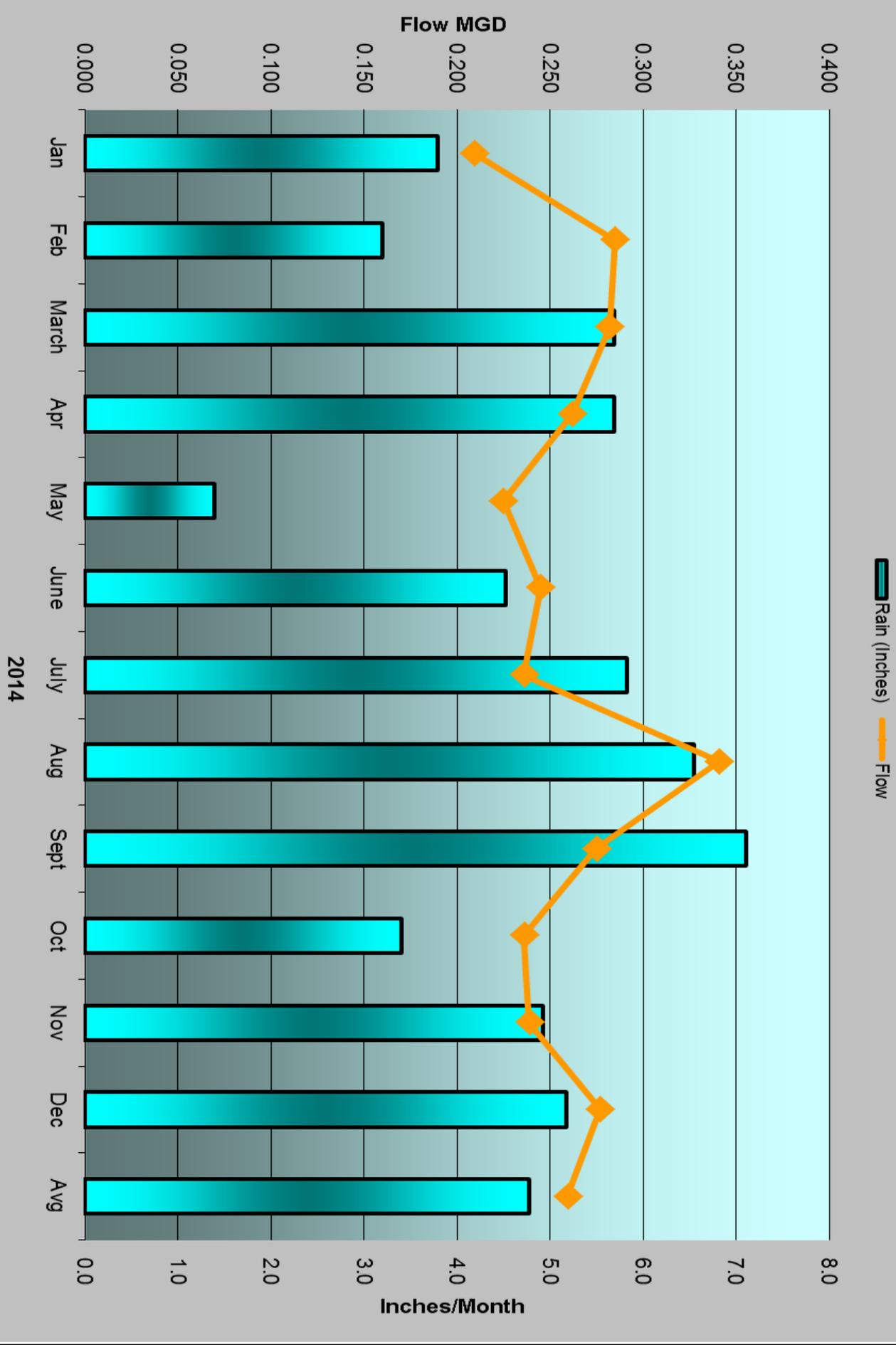
Mar.		
8,740,463	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.282	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.389	MAX DAY (MGD)	
5.69	TOTAL INCHES RAIN FALL	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Apr.		
7,853,836	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.262	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.329	MAX DAY (MGD)	
5.69	TOTAL INCHES RAIN FALL	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

May		
6,984,162	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.225	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.405	MAX DAY (MGD)	
1.39	TOTAL INCHES RAIN FALL	
395	COLLECTION SYSTEM PIPE CLEANED	
92	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Jun.		
7,347,735	TOTAL GALLONS TO FRENCH CREEK WWTP	
0.245	AVERAGE FLOW (MGD) (PERMIT FLOW 0.5 MGD)	
0.287	MAX DAY (MGD)	
4.53	TOTAL INCHES RAIN FALL	
0	COLLECTION SYSTEM PIPE CLEANED	
0	COLLECTION SYSTEM PIPE VIDEOED	
NO	COLLECTION SYSTEM OVERFLOWS?	

Piney Green Collection System



Collection System Name: Springdale Wastewater Collection System
Collection System Grade/ Type Operation: Grade 1/ Domestic
Responsible Entity: Onslow Water and Sewer Authority (ONWASA)
Facility Address: Southwest area of Onslow County
Contact Phone: 910-937-7509
Operator in Responsible Charge (ORC): Timothy V. Webb
ORC Type / Grade License: CS Grade 4 License # 987495
Applicable Collection System Permit Numbers: WQCS00249

Description of Facility: This system consist of eighteen thousand six hundred and seventy seven feet (18,677') of gravity sewer ranging from eight inch (8") to twelve inch (12"), ten thousand four hundred and twenty-four feet (10,424) of force mains ranging from four inch (4") to six inch (6")

2014
Springdale Collection System
Annual WW Report

Jan.
1,898,838 TOTAL GALLONS TREATED
0.061 AVERAGE FLOW (MGD)
0.076 MAX DAY (MGD)
N/A TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

Feb.
1,930,072 TOTAL GALLONS TREATED
0.069 AVERAGE FLOW (MGD)
0.078 MAX DAY (MGD)
2.08 TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

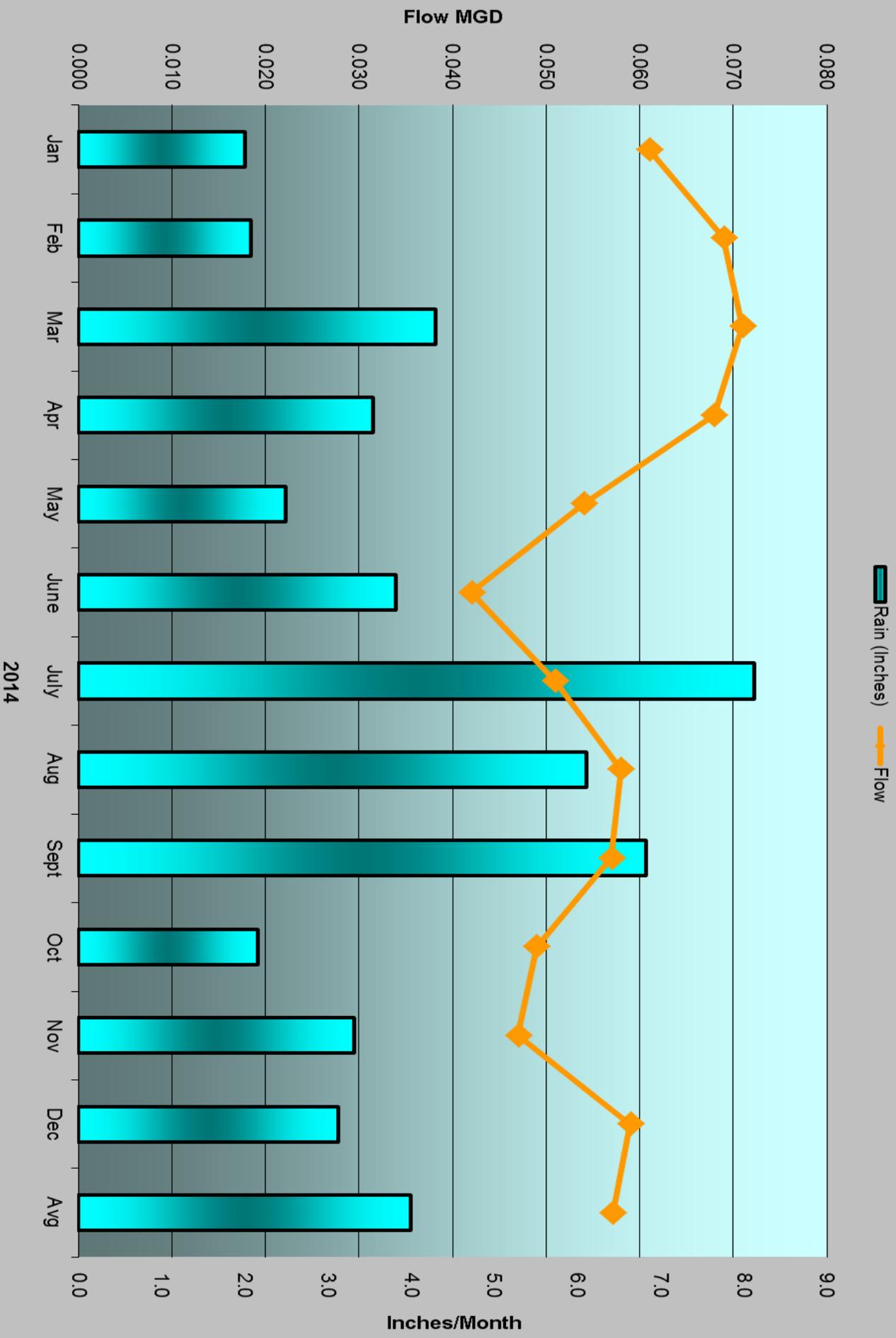
Mar.
2,208,143 TOTAL GALLONS TREATED
0.071 AVERAGE FLOW (MGD)
0.100 MAX DAY (MGD)
4.3 TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

Apr.
2,026,415 TOTAL GALLONS TREATED
0.068 AVERAGE FLOW (MGD)
0.099 MAX DAY (MGD)
3.54 TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

May
1,663,946 TOTAL GALLONS TREATED
0.054 AVERAGE FLOW (MGD)
0.066 MAX DAY (MGD)
2.49 TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

Jun.
1,254,712 TOTAL GALLONS TREATED
0.042 AVERAGE FLOW (MGD)
0.051 MAX DAY (MGD)
3.82 TOTAL INCHES RAIN FALL
0 COLLECTION SYSTEM PIPE CLEANED
0 COLLECTION SYSTEM PIPE VIDEOED
NO COLLECTION SYSTEM OVERFLOWS?

Springdale Collection System



Collection System Name: Summerhouse Wastewater Collection System

Collection System Grade/ Type Operation: Grade 1/ Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Stump Sound area of Onslow County Summerhouse
Subdivision

Contact Phone: 910-937-7509

Operator in Responsible Charge (ORC): Timothy V. Webb

ORC Type / Grade License: CS Grade 4 License # 987495

Applicable Collection System Permit Numbers: WQCS00249

Description of Facility: This system consist of five (5) pump stations, thirty seven thousand and twenty-eight (37,028') 8" gravity sewer, nineteen thousand eight hundred and forty-two feet (19,842') of force mains ranging from four inch (4") to six inch (8") . Currently the system operates under a Pump and Haul permit issued by NC DENR. The permit number is WQ0036955. This permit allows ONWASA to haul wastewater to either the Holly Ridge treatment plant or the Piney Green collection system for disposal.