

**ONWASA Wastewater Facilities
Annual Report
2010**

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

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 be available as a drinking water source for future use 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 are our best allies.

ONWASA currently manages six wastewater facilities, The Richlands Facility, The Springdale Acres Facility, The Holly Ridge Facility, The Kenwood Facility, The Swansboro Facility, and the Hickory Grove Facility. This report contains a description and snap shot of the monthly activities of each plant and the collection system serving the facility.

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

ONWASA
228 Georgetown Rd.
Jacksonville, NC 28540
910-455-0722

or through our website at <http://www.onwasa.com>



Onslow Water & Sewer Authority

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ANNUAL PERFORMANCE REPORT

Hickory Grove: Summary

The Hickory Grove Wastewater Treatment Plant (WWTP) is located off Easy Street in the Hickory Grove Subdivision and is serviced regularly by an ONWASA wastewater operator. The plant does not have a full-time employee. The plant is designed to treat 22,500 gallons per day (GPD). The average flow at the plant in 2010 was 0.013 million gallons per day (MGD), which is 58 % of the design flow at the wastewater plant. The facility treated a total of 4,818,000 gallons (Gals.) during the year. The Plant had sampling violations in the months of January, February, March, April, May, June, July, August, September, and December.

The Hickory Grove infrastructure has 1591 linear feet (L.F.) of various size pipe materials. A total of 1,040 L.F. of piping was cleaned in 2010, which is 65 % of the total collection system piping. There were no violations of the Hickory Grove Collection System during 2010.

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): Mark C. Young
ORC Type / Grade License: WW3, CS2, SI, SS
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 chorine 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: Performance

January, 2010

Total Flow: 352,000 gallons

Average Daily Flow: .011 MGD

Total Rainfall: 1.3 inches

Did the facility have any monitoring violations? YES

BOD, TSS, and fecal coliform

Did the facility have any overflows? NO

February, 2010

Total Flow: 462,400 gallons

Average Daily Flow: .016 MGD

Total Rainfall: 1.75 inches

Did the facility have any monitoring violations? YES

BOD, TSS, PH, and fecal coliform

Did the facility have any overflows? NO

March, 2010

Total Flow: 328,200 gallons

Average Daily Flow: .011 MGD

Total Rainfall: 2.4 inches

Did the facility have any monitoring violations? YES

Sample collection frequency

Did the facility have any overflows? NO

April, 2010

Total Flow: 353,600 gallons

Average Daily Flow: .011 MGD

Total Rainfall: .40 inches

Did the facility have any monitoring violations? YES

Dissolved Oxygen and fecal coliform

Did the facility have any overflows? NO

May, 2010

Total Flow: 334,000 gallons

Average Daily Flow: .011 MGD

Total Rainfall: 1.9 inches

Did the facility have any monitoring violations? YES

BOD and dissolved oxygen

Did the facility have any overflows? NO

June, 2010

Total Flow: 380,500 gallons

Average Daily Flow: .012 MGD

Total Rainfall: 1.1 inches

Did the facility have any monitoring violations? YES

BOD, dissolved oxygen, and fecal coliform

Did the facility have any overflows? NO

July, 2010

Total Flow: 433,600 gallons

Average Daily Flow: .013 MGD

Total Rainfall: 1.6 inches

Did the facility have any monitoring violations? YES

BOD, and fecal coliform

Did the facility have any overflows? NO

August, 2010

Total Flow: 474,300 gallons

Average Daily Flow: .015 MGD

Total Rainfall: 4.0 inches

Did the facility have any monitoring violations? YES

BOD and dissolved oxygen

Did the facility have any overflows? NO

September, 2010

Total Flow: 500,300 gallons

Average Daily Flow: .016 MGD

Total Rainfall: 8.8 inches

Did the facility have any monitoring violations? YES

BOD

Did the facility have any overflows? NO

October, 2010

Total Flow: 439,100 gallons

Average Daily Flow: .014 MGD

Total Rainfall: 13.9 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November, 2010

Total Flow: 383,000 gallons

Average Daily Flow: .012 MGD

Total Rainfall: 1.35 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2010

Total Flow: 377,400 gallons

Average Daily Flow: .012 MGD

Total Rainfall: 2.45 inches

Did the facility have any monitoring violations? YES

Fecal coliform

Did the facility have any overflows? NO

Hickory Grove: Collection System

Collection System Name: ONWASA- 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) 455-0722 ext 7560

Operator in Responsible Charge (ORC): Gurvis G Mobley Jr. (Junior)

ORC Type / Grade License: CS Grade 4 / License # 990240

Applicable Collection System Permit Numbers: CS Permit # WQCS00249

Responsible Entity: ONWASA

Description of Facility:

Total L.F. of pipe: 1,591

Total number of pump stations: 0

Total L.F. of pipe cleaned: 1,040

Total L.F. of pipe televised: 0

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO



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ANNUAL PERFORMANCE REPORT

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 0.260 million gallons per day (mgd). The average flow at the plant in 2010 was 0.129 mgd, which is 49.6% of the permitted design flow of the wastewater plant. The facility treated a total of 46,911,010 gallons during the past year. There were no violations of the permit limit and no monitoring or reporting violations noted.

Holly Ridge is a non-discharge facility which land applies the effluent on 87.07 acres located on 220 Dolph Everett Road. The effluent is held in a 9.5-acre pond located at the spray field site where its sprayed on various fields. ONWASA spray irrigated a total of 42,118,527 gallons in 2010. There were no violations of the permit limit and no monitoring or reporting violations in 2010.

The Holly Ridge wastewater collection system consists of 120,011 linear feet (L.F.) of various size piping and thirteen sewage-pumping stations. A total of 28,080 L.F. of piping was cleaned in 2010, which is 23% of the total collection system piping. In addition, 3,188 L.F. of piping was televised to locate potential problems. There were no violations of the Holly Ridge Collection System during 2010.

Holly Ridge: 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 Irr. Facility)

Facility Phone: 910 329-0951

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

ORC Type / Grade License: WW4: 991815, SI: 987930, CS2: 985635,

SS: 989660, PC1: 990469

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 gal. 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 Irr. Facility.

The Surface Irr. Facility is a 240,179 GPD facility consisting of a 13.30 MG storage lagoon (51 days storage); ten(10) spray fields consisting of 99.59 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 to surface waters facility.

Holly Ridge: Performance

January, 2010

Total Flow: 4,075,350 gallons

Total Sprayed: 2,896,255 gallons

Average Daily Flow: 131,463 MGD

Total Rainfall: 3.54 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

February, 2010

Total Flow: 3,905,640 gallons

Total Sprayed: 3,832,405 gallons

Average Daily Flow: 139,487 MGD

Total Rainfall: 3.99 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

March, 2010

Total Flow: 4,278,610 gallons

Total Sprayed: 4,432,290 gallons

Average Daily Flow: 138,020 MGD

Total Rainfall: 4.17 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2010

Total Flow: 3,792,800 gallons
Total Sprayed: 4,613,015 gallons
Average Daily Flow: 126,427 MGD
Total Rainfall: .75 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

May, 2010

Total Flow: 3,346,940 gallons
Total Sprayed: 3,538,600 gallons
Average Daily Flow: 107,966 MGD
Total Rainfall: 1.96 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

June, 2010

Total Flow: 3,425,950 gallons
Total Sprayed: 3,805,640 gallons
Average Daily Flow: 114,198 MGD
Total Rainfall: 1.71 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

July, 2010

Total Flow: 3,542,980 gallons
Total Sprayed: 3,147,050 gallons
Average Daily Flow: 114,290 MGD
Total Rainfall: 5.30 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

August, 2010

Total Flow: 3,362,460 gallons
Total Sprayed: 3,256,285 gallons
Average Daily Flow: 108,466 MGD
Total Rainfall: 3.08 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

September, 2010

Total Flow: 4,374,000 gallons
Total Sprayed: 3,156,360 gallons
Average Daily Flow: 145,800 MGD
Total Rainfall: 19.16 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? YES

On 30 Sep 2010, Due to excessive rainfall, the effluent spilled over the containment area at the U.V. System. NCDWQ, Jim Bushardt, was notified of situation. Jim Bushardt came on site to evaluate situation. Added chlorine to help eliminate any contaminates. Jim Bushardt agreed we had done all we could do for the situation.

October, 2010

Total Flow: 4,816,050 gallons
Total Sprayed: 3,382,957 gallons
Average Daily Flow: 155,356 MGD
Total Rainfall: 2.28 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? YES

On 1 Oct 2010 overflow continued thru 1200 from the event listed on Sept. 2010. After spill, report was sent to NCDWQ, Jim Bushardt. Overflow was estimated to be 130,000-150,000 gals.of effluent to a unnamed creek behind the WWTP. Rainfall total for this event: 20.50"

November 2010

Total Flow: 3,860,680 gallons
Total Sprayed: 2,896,140 gallons
Average Daily Flow: 128,689 MGD
Total Rainfall: .95 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

December, 2010

Total Flow: 4,129,550 gallons
Total Sprayed: 3,161,530 gallons
Average Daily Flow: 133,211 MGD
Total Rainfall: 3.11 in.

Did the facility have any monitoring violations? NO
Did the facility have any overflows? NO

III. Collection System

Collection System Name: Holly Ridge Collection System

Collection System Grade/ Type Operation: Grade 1 / Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

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

Contact Phone: 910 455-0722 ext.7560

Operator in Responsible Charge (ORC): Gurvis Glenn Mobley Jr. (Junior)

ORC Type / Grade License: CS Grade 4 License # 990240

Applicable Collection System Permit Numbers: N/A

Description of Facility: This system consist of fifty-two thousand eight hundred feet (52,800') of gravity sewer main, ranging from eight inch (8") to twelve (12"), and twenty-three thousand seven hundred and sixty feet (23,760') of force main, ranging from two inch (2") to six inch (6").

Total Linier feet of pipe: 120,011

Total number of pump stations: 12

Total Linier feet of pipe cleaned: 28,080

Total Linier feet of pipe Videoed: 3,188

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO

Hunters Creek: Collection System

Collection System Name: **Hunters Creek Collections System**

Collection System Grade/ Type Operation: **Grade 2 / Domestic**

Responsible Entity: **Onslow Water and Sewer Authority (ONWASA)**

Facility Address: **Located in Hunters Creek Subdivision in the northwest part of Onslow County.**

Contact Phone: **(910) 455-0722 ext 7560**

Operator in Responsible Charge (ORC): **Gurvis Glenn Mobley Jr. (Junior)**

ORC Type / Grade License: **CS 4 / 990240**

Applicable Collection System Permit Numbers: **WQCS00249**

Description of Facility: **This system consist of thirty- seven thousand eight hundred and six feet (37,806') of gravity sewer main, ranging from eight inch (8") to fifteen inch (15"), and fifty thousand one hundred and eight feet (50,108') of force main, ranging from three inch (3") to twenty-four inch (24"). This facility goes to the Wastewater treatment facility aboard the Marine Corp Base Camp Lejeune at French Creek.**

Total Linier feet of pipe: **95,782'**

Total number of pump stations: **5**

Total Linier feet of pipe cleaned: **20,761.0'**

Total Linier feet of pipe Videoed: **674.5'**

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO



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ANNUAL PERFORMANCE REPORT

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 2010 was .039 mgd, which is 79.5 % of the design flow of the wastewater plant. The facility treated a total of 14,427,544 gallons during the year. The plant discharges into Southwest Creek on Blue Creek Road. The Kenwood facility exceeded weekly Biochemical Oxygen Demand (BOD) limits in the months of September and October.

The Kenwood Infrastructure has 9,351 feet of various sizes of piping material and three sewage-pumping stations. A total of 6,200 feet of pipe was cleaned in 2010, which is 66 % of total pipe. There were no violations of the Kenwood Subdivision Collection System during 2010.

Kenwood: General Information

Facility Name: Kenwood Wastewater Treatment Plant

Facility Type/ Operation: Activated Sludge Extend Air

Responsible Entity: Onslow Water and Sewer Authority

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

Facility Phone: 910-455-0722

Operator in Responsible Charge (ORC):Terri D.Maggard (ORC)

ORC Type / Grade License: WW3, SS, PC

Applicable Facility Permit Numbers: NC 0030813

Description of Facility: Wastewater Facility is located in Jacksonville, NC, where it was constructed in 1976. The current plant is a .049 gallons per day, Treatment Facility. The Treatment process consist of, bar screens, EQ Basin, for equalized flow to extended aeration, 2 clarifiers, 2 sandfilters, clearwell, effluent with gaseous chlorine. Boi solids removal and disposal, are applied to drying bed and sludge haul removal. The plant Effluent is discharged to the Southwest Creek on HWY 53. D/Chlor system added to plant May 1, 2009.

Kenwood: Performance

January, 2010

Total Flow: 1,493,127 gallons

Average Daily Flow: .048 MGD

Total Rainfall: 5.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

February, 2010

Total Flow: 1,435,404 gallons

Average Daily Flow: .051 MGD

Total Rainfall: 7.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

March, 2010

Total Flow: 1,354,915 gallons

Average Daily Flow: .43,707 MGD

Total Rainfall: 0.17 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2010

Total Flow: 1,129,946 gallons

Average Daily Flow: 37,665 MGD

Total Rainfall: .04 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

May, 2010

Total Flow: 1,184,881 gallons

Average Daily Flow: 38,222 MGD

Total Rainfall: 1.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

June, 2010

Total Flow: 1,601,583 gallons

Average Daily Flow: 35,386 MGD

Total Rainfall: 5.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2010Total Flow: 1,050,352 gallonsAverage Daily Flow: 33,882 MGDTotal Rainfall: 5.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2010Total Flow: 953,696 gallonsAverage Daily Flow: 30,764 MGDTotal Rainfall: 0.17 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

September, 2010Total Flow: 1,182,402 gallonsAverage Daily Flow: 39,414 MGDTotal Rainfall: 19.1 inches

Did the facility have any monitoring violations? YES

The plant exceeded weekly permitted BOD limits.

Did the facility have any overflows? NO

October, 2010Total Flow: 1,181,471 gallonsAverage Daily Flow: 38,112 MGDTotal Rainfall: 5.2 inches

Did the facility have any monitoring violations? YES

The plant exceeded weekly permitted BOD limits.

Did the facility have any overflows? NO

November, 2010Total Flow: 811,122 gallonsAverage Daily Flow: 27,037 MGDTotal Rainfall: 1.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2010Total Flow: 823698 gallonsAverage Daily Flow: 26571 MGDTotal Rainfall: 3.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

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) 455-0722 ext 7560
Operator in Responsible Charge (ORC): Gurvis G Mobley Jr. (Junior)
ORC Type / Grade License: CS Grade 4 / License # 990240

Applicable Collection System Permit Numbers: CS Permit # WQCS00249
Description of Facility: This system consists of nine thousand three hundred and fifty-one feet (9,351') of eight inch (8'') gravity sewer and fifteen thousand nine hundred and forty-two feet (15,942') of four inch (4'') force main, and three pump stations.

Total Linier feet of pipe:	<u>9,351'</u>
Total number of pump stations:	<u>3</u>
Total Linier feet of pipe cleaned:	<u>6,200'</u>
Total Linier feet of pipe Videoed:	<u>0'</u>

Did the Collection System have any monitoring violations?	NO
Did the Collection System have any overflows?	NO
Did the Collection System have any overflows?	NO

Any person(s) with questions regarding this report may contact the Onslow Water and Sewer Authority for more information.

ONWASA
228 Georgetown Rd.
Jacksonville, NC 28540
910-455-0722



Onslow Water & Sewer Authority

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ANNUAL PERFORMANCE REPORT

Richlands: Summary

Richlands Wastewater Treatment Facility is located at 203 Jimmy Powell Lane and is staffed by one full-time ONWASA plant operator. The plant is permitted to treat 0.250 million gallons per day (mgd). The average flow at the plant in 2010 was 0.170 mgd, which is 68.2 % of the permitted design flow of the wastewater plant. The facility treated a total of 62,042,823 gallons during the past year. There were two permit violations for excessive average daily effluent flow one each in January and February as well as an exceedance of the daily average for Biochemical Oxygen Demand in September 2010.

The Richlands Infrastructure has 73,940 feet of various sizes of piping material and eleven sewage-pumping stations. A total of 22,721 feet of piping was cleaned in 2010, which is 30 % of the total collection system piping. In addition, 218 feet was televised to locate potential problems. There were no violations of the Richlands Collection System during 2010.

Richlands: General Information

Facility Name: Richlands WWTP
Facility Type/ Operation: Wastewater
Responsible Entity: Onslow Water and Sewer Authority
Facility Address: 203 Jimmy Powell Lane
Richlands, NC 28574
Facility Phone: (910) 324-5316
Operator in Responsible Charge (ORC): Daniel Straub
ORC Type / Grade License: WW3 988655
Applicable Facility Permit Numbers: NC0023230

Description of Facility: The Richlands Wastewater Treatment Plant is a 0.250 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: Performance Data

January, 2010

Total Flow: 8,561,100 gallons

Average Daily Flow: 0.276 MGD

Total Rainfall: 4.57 inches

Did the facility have any monitoring violations? YES

The daily average flow exceeded the monthly limit for January.

Did the facility have any sewage overflows? NO

February, 2010

Total Flow: 8,217,383 gallons

Average Daily Flow: 0.293 MGD

Total Rainfall: 3.35 inches

Did the facility have any monitoring violations? YES

The daily average flow exceeded the monthly limit for the month of February.

Did the facility have any overflows? NO

March, 2010

Total Flow: 6,672,984 gallons

Average Daily Flow: 0.215 MGD

Total Rainfall: 3.11 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2010

Total Flow: 4,077,676 gallons

Average Daily Flow: 0.136 MGD

Total Rainfall: 0.51 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

May, 2010

Total Flow: 3,974,377 gallons

Average Daily Flow: 0.128 MGD

Total Rainfall: 3.66 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

June, 2010

Total Flow: 3,522,496 gallons

Average Daily Flow: 0.128 MGD

Total Rainfall: 3.66 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2010Total Flow: 3,522,496 gallonsAverage Daily Flow: 0.123 MGDTotal Rainfall: 6.58 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2010Total Flow: 3,562,220 gallonsAverage Daily Flow: 0.115 MGDTotal Rainfall: 3.24 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

September, 2010Total Flow: 4,598,904 gallonsAverage Daily Flow: 0.153 MGDTotal Rainfall: 15.31 inches

Did the facility have any monitoring violations? YES

The plant exceeded the daily limit for effluent Biochemical Oxygen Demand on September 14th.

Did the facility have any overflows? NO

October, 2010Total Flow: 6,515,097 gallonsAverage Daily Flow: 0.210 MGDTotal Rainfall: 5.05 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November, 2010Total Flow: 4,205,386 gallonsAverage Daily Flow: 0.140 MGDTotal Rainfall: 0.91 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2010Total Flow: 4,320,537 gallonsAverage Daily Flow: 0.139 MGDTotal Rainfall: 2.77 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Richlands: Collection System

Collection System Name: Town of Richlands

Collection System Grade/ Type Operation: Grade 1 / Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Town of Richlands located in the northwest part of Onslow County

Contact Phone: 910-455-0722 ext 248

Operator in Responsible Charge (ORC): Gurvis Glenn Mobley Jr. (Junior)

ORC Type / Grade License: CS / Grade 4 License # 990240

Applicable Collection System Permit Numbers: WQCS00249

Description of Facility: This system consist of seventy-three thousand nine hundred and forty feet (73,940) of gravity sewer ranging from eight inch (8") to twelve inch (12"), also seventeen thousand four hundred and twenty-four feet (17,424') of force mains ranging from four inch (4") to six inch (8")

Total Linear feet (LF) of pipe: 73,940

Total number of pump stations: 11

Total LF of pipe cleaned: 22,721

Total LF of pipe televised: 218

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO



ANNUAL PERFORMANCE REPORT

Springdale Acres: Summary

The Springdale Acres Wastewater Treatment Facility is located at 165 Surrey Drive Jacksonville, North Carolina and currently has one employee. The plant is designed to treat 0.050 mgd. There is a Special Order of Consent (SOC) in effect that allows the plant to process 0.115 mgd. The average flow at the plant in 2010 was 0.098 mgd, which is 196 % of the design flow of the wastewater plant. The facility treated a total of 36,777,814 gallons during the year.

There were several permit violations.

In January, the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on January 19th and monthly average flow was exceeded. In February, the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on the 25th and the monthly average flow was exceeded. In March, the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on the 16th and 30th and the monthly average flow was exceeded. In April the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on the 15th and the monthly average BOD. In May the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on the 4th and 13th as well as the daily limit for enterococci on the 18th, 19th and 20th. In July, the daily BOD permitted limit was violated on June 27th and 28th. In August, the permitted daily limit for BOD was exceeded on August 4th and 5th as well as the daily limit for enterococci on the 27th. In September, the daily permitted limit for Biochemical Oxygen Demand (BOD) was violated on January 21st, 22nd and 23rd and monthly average flow was exceeded. In October, the daily average permitted flow was exceeded.

Although it seems like there were a lot of violations for the facility, the plant has shown progress in its operation and reliability. We continue to work to improve our operation of the wastewater facility and the collection system feeding the facility. Again, although the facility has been permitted to treat 0.115 mgd it was only designed to treat 0.050 mgd and the staff does its best to treat whatever flow comes into the facility to the standards expected by ONWASA and state regulations.

Springdale Acres infrastructure consists of 18,677 feet of various size piping of which 11,908 feet or 63% was cleaned in 2010. In addition 319 feet was camera inspected for potential problems. There were no violations of the Springdale Collection System during 2010.

Springdale Acres: General Information

Facility Name: Springdale Acres WWTP
Facility Type/ Operation: Wastewater
Responsible Entity: Onslow Water and Sewer Authority
Facility Address: 165 Surrey Drive
Jacksonville, NC 28540
Facility Phone: _____
Operator in Responsible Charge (ORC): Daniel Straub
ORC Type / Grade License: WW3 988655
Applicable Facility Permit Numbers: NC0057053

Description of Facility: The Springdale Acres Wastewater Treatment Plant is a 0.050 million gallons per day activated sludge treatment facility. The plant treats wastewater utilizing preliminary screening, secondary treatment using an aeration basin and secondary clarifier, tertiary effluent filtration followed by chlorine disinfection and post aeration prior to discharging effluent to Brinson Creek.

Springdale Acres: Performance

January, 2010

Total Flow: 2,981,000 gallons
Average Daily Flow: 0.096 MGD
Total Rainfall: 6.0 inches

Did the facility have any monitoring violations? YES

The effluent BOD daily limit on January 19th and the monthly average for effluent flow.

Did the facility have any overflows? NO

February, 2010

Total Flow: 2,747,080 gallons
Average Daily Flow: 0.098 MGD
Total Rainfall: 6.5 inches

Did the facility have any monitoring violations? YES

Monthly average flow and high effluent BOD on the 25th.

Did the facility have any overflows? NO

March, 2010

Total Flow: 3,365,300 gallons
Average Daily Flow: 0.109 MGD
Total Rainfall: 4.5 inches

Did the facility have any monitoring violations? YES

Daily limit for effluent BOD on the 16th and 30th and monthly flow.

Did the facility have any overflows? NO

April, 2010

Total Flow: 3,856,760 gallons

Average Daily Flow: 0.095 MGD

Total Rainfall: 1.6 inches

Did the facility have any monitoring violations? YES

The effluent BOD monthly average and daily BOD on the 15th.

Did the facility have any overflows? NO

May, 2010

Total Flow: 2,441,740 gallons

Average Daily Flow: 0.079 MGD

Total Rainfall: 1.9 inches

Did the facility have any monitoring violations? YES

The effluent BOD for the 4th and 13th and daily enterococci limits for the 18th, 19th and 20th.

Did the facility have any overflows? NO

June, 2010

Total Flow: 2,074,970 gallons

Average Daily Flow: 0.069 MGD

Total Rainfall: 9.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2010

Total Flow: 2,379,680 gallons

Average Daily Flow: 0.077 MGD

Total Rainfall: 14.3 inches

Did the facility have any monitoring violations? YES

The effluent BOD for the 27th and 28th.

Did the facility have any overflows? NO

August, 2010

Total Flow: 2,225,300 gallons

Average Daily Flow: 0.072 MGD

Total Rainfall: 5.4 inches

Did the facility have any monitoring violations? YES

The daily BOD readings for August 4th and 5th, and enterococci on the 27th.

Did the facility have any overflows? NO

September, 2010

Total Flow: 4,117,990 gallons

Average Daily Flow: 0.137 MGD

Total Rainfall: 28.2 inches

Did the facility have any monitoring violations? YES

Due to the substantial rainfall the monthly flow and daily BOD's for the 21st, 22nd and 23rd were exceeded.

Did the facility have any overflows? NO

October, 2010

Total Flow: 5,094,731 gallons

Average Daily Flow: 0.164 MGD

Total Rainfall: 14.3 inches

Did the facility have any monitoring violations? YES

High effluent flow average.

Did the facility have any overflows? NO

November, 2010

Total Flow: 2,704,293 gallons

Average Daily Flow: 0.090 MGD

Total Rainfall: 1.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2010

Total Flow: 2,788,970 gallons

Average Daily Flow: 0.90 MGD

Total Rainfall: 5.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Springdale Acres: Collection System

Collection System Name: Springdale Acres

Collection System Grade/ Type Operation: Grade 1 / Domestic

Responsible Entity: Onslow Water and Sewer Authority (ONWASA)

Facility Address: Springdale Acres Subdivision Jacksonville, NC

Contact Phone: 910-455-0722 ext 7560

Operator in Responsible Charge (ORC): Gurvis Glenn Mobley Jr. (Junior)

ORC Type / Grade License: CS / Grade 4 License # 990240

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 (10,275) of force mains ranging from four inch (4") to six inch (6")

Total Linear feet of pipe: 18,677

Total number of pump stations: 3

Total Linear feet of pipe cleaned: 11,908

Total Linear feet of pipe Videoed: 319

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO



Onslow Water & Sewer Authority

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ANNUAL PERFORMANCE REPORT

Swansboro: Summary

Swansboro Wastewater Treatment Facility is located at 199 Williams Street and currently has three employees. The plant is designed to treat 0.600 mgd. The average flow at the plant in 2009 was 0.266 mgd, which is 44.3 % of the design flow at the wastewater plant. The facility treated a total of 97,035,050 gallons during the year. There was a violation of fecal coliform in the months of August and September, and flow limits into the infiltration ponds were exceeded in January, February, August, September, and October.

The Swansboro Infrastructure has 108,956 feet of various sizes of piping material and 21 sewage-pumping stations. A total of 31,174 feet of piping was cleaned in 2010, which is 29 % of the total pipe. In addition, 1,712 feet was camera inspected to locate potential problems. There were no violations of the Swansboro Collection System during 2010.

Swansboro: 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): Mark C. Young

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

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: Performance

January, 2010

Total Flow: 10,416,000 gallons

Average Daily Flow: .336 MGD

Total Rainfall: 4.6 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds.

Did the facility have any overflows? NO

February, 2010

Total Flow: 9,884,000 gallons

Average Daily Flow: .353 MGD

Total Rainfall: 3.9 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds.

Did the facility have any overflows? NO

March, 2010

Total Flow: 9,858,000 gallons

Average Daily Flow: .318 MGD

Total Rainfall: 4.05 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2010

Total Flow: 8,070,000 gallons

Average Daily Flow: .269 MGD

Total Rainfall: .4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

May, 2010

Total Flow: 7,781,000 gallons

Average Daily Flow: .251 MGD

Total Rainfall: 1.0 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

June, 2010

Total Flow: 7,290,000 gallons

Average Daily Flow: .243 MGD

Total Rainfall: 1.34 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2010

Total Flow: 7,502,000 gallons

Average Daily Flow: .242 MGD

Total Rainfall: 5.74 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2010

Total Flow: 8,773,000 gallons

Average Daily Flow: .283 MGD

Total Rainfall: 11.85 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds and Fecal Coliform

Did the facility have any overflows? NO

September, 2010

Total Flow: 9,210,000 gallons

Average Daily Flow: .307 MGD

Total Rainfall: 20.2 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds and Fecal Coliform

Did the facility have any overflows? NO

October, 2010

Total Flow: 10,075,000 gallons

Average Daily Flow: .325 MGD

Total Rainfall: 1.9 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds.

Did the facility have any overflows? NO

November, 2010

Total Flow: 7,741,000 gallons

Average Daily Flow: .258 MGD

Total Rainfall: 2.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2010

Total Flow: 7,905,000 gallons

Average Daily Flow: .255 MGD

Total Rainfall: 4.02 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

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 southeast part of Onslow County

Contact Phone: 910-455-0722 ext 7560

Operator in Responsible Charge (ORC): Gurvis Glenn Mobley Jr. (Junior)

ORC Type / Grade License: CS Grade 4 License # 990240

Applicable Collection System Permit Numbers: WQCS00249

Description of Facility: This system consist of one hundred and eight thousand nine hundred and fifty six feet (108,956') of gravity sewer ranging from sizes from eight inch (8") to eighteen inch (18"), and seventy-four thousand and thirty-seven feet (74,037') of sewer force mains ranging from six inch (6") to twelve inch (12").

Total Linier feet of pipe: 108,956

Total number of pump stations: 21

Total Linier feet of pipe cleaned: 31,174

Total Linier feet of pipe Videoed: 1,712

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO