



ONWASA Wastewater Facilities Annual Report 2011

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 System 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 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 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>



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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 2011 was 0.173 mgd, which is 69 % of the permitted design flow of the wastewater plant. The facility treated a total of 62,744,269 gallons during the past year. There were no permit violations for excessive average daily effluent flow however there were several other violations. In April, there were several violations due to a suspected undocumented dumping of toxic substances into the Richlands collection system. These violations included the weekly effluent BOD limits for the weeks of April 11th and 18th and the monthly effluent BOD limit. Also, the weekly effluent Ammonia Nitrogen limit was exceeded for the weeks of April 11th and 25th as well as the monthly effluent Ammonia Nitrogen limit. On May 5th, July 12th and August 19th, the weekly effluent BOD limit was exceeded due to high influent BOD strength.

The Richlands Infrastructure has 73,940 feet of various sizes of piping material and eleven sewage-pumping stations. A total of 37,786 feet of piping was cleaned in 2011, which is 51% of the total collection system piping. There were no violations of the Richlands Collection System during 2011.

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: WW4 996562
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, 2011

Total Flow: 5,618,646 gallons

Average Daily Flow: 0.181 MGD

Total Rainfall: 3.29 inches

Did the facility have any monitoring violations? NO

Did the facility have any sewage overflows? NO

February, 2011

Total Flow: 7,523,689 gallons

Average Daily Flow: 0.268 MGD

Total Rainfall: 3.98 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

March, 2011

Total Flow: 5,333,630 gallons

Average Daily Flow: 0.172 MGD

Total Rainfall: 2.69 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2011

Total Flow: 4,522,209 gallons

Average Daily Flow: 0.151 MGD

Total Rainfall: 1.6 inches

Did the facility have any monitoring violations? YES

The weekly effluent BOD limits for the weeks of April 11th and 18th and the monthly effluent BOD limit. Also, the weekly effluent Ammonia Nitrogen limit was exceeded for the weeks of April 11th and 25th as well as the monthly Ammonia Nitrogen limit.

Did the facility have any overflows? NO

May, 2011

Total Flow: 4,375,886 gallons

Average Daily Flow: 0.141 MGD

Total Rainfall: 1.07 inches

Did the facility have any monitoring violations? YES

On May 5th, the weekly effluent BOD limit was exceeded due to high influent BOD strength.

Did the facility have any overflows? NO

June, 2011

Total Flow: 3,823,379 gallons

Average Daily Flow: 0.127 MGD

Total Rainfall: 0.86 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2011

Total Flow: 4,121,225 gallons

Average Daily Flow: 0.132 MGD

Total Rainfall: 5.2 inches

Did the facility have any monitoring violations? YES

On July 12th, the weekly effluent BOD limit was exceeded due to high influent BOD strength.

Did the facility have any overflows? NO

August, 2011

Total Flow: 5,866,851 gallons

Average Daily Flow: 0.189 MGD

Total Rainfall: 15.06 inches

Did the facility have any monitoring violations? YES

On August 19th, the weekly effluent BOD limit was exceeded due to high influent BOD strength.

Did the facility have any overflows? NO

September, 2011

Total Flow: 6,375,676 gallons

Average Daily Flow: 0.213 MGD

Total Rainfall: 1.77 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

October, 2011

Total Flow: 4,857,534 gallons

Average Daily Flow: 0.157 MGD

Total Rainfall: 2.49 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November, 2011

Total Flow: 4,822,793 gallons

Average Daily Flow: 0.161 MGD

Total Rainfall: 3.02 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2011

Total Flow: 5,502,751 gallons

Average Daily Flow: 0.178 MGD

Total Rainfall: 0.36 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 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 seven-three 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: 37,786'

Total LF 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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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 2011 was 0.089 mgd, which is 178 % of the design flow of the wastewater plant. The facility treated a total of 32,488,086 gallons during the year.

There was only one permit violation for 2011. The February monthly average daily flow was higher than the allowable limit.

Springdale Acres infrastructure consists of 18,677 feet of various size piping of which 9,753' or 52% was cleaned in 2011. There were no violations of the Springdale Collection System during 2011.

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: WW4 996562

Applicable Facility Permit Numbers: NC0057053

Description of Facility: The Springdale Acres Wastewater Treatment Plant is a 0.050 Million gallon 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, 2011

Total Flow: 3,136,415 gallons

Average Daily Flow: 0.101 MGD

Total Rainfall: 4.9 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

February, 2011

Total Flow: 3,456,801 gallons

Average Daily Flow: 0.123 MGD

Total Rainfall: 11.8 inches

Did the facility have any monitoring violations? YES

The average daily flow for the month of February was higher than the allowable limit due to high rainfall.

Did the facility have any overflows? NO

March, 2011

Total Flow: 3,405,539 gallons

Average Daily Flow: 0.110 MGD

Total Rainfall: 6.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2011

Total Flow: 2,934,857 gallons

Average Daily Flow: 0.098 MGD

Total Rainfall: 3.0 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

May, 2011

Total Flow: 2,575,517 gallons

Average Daily Flow: 0.083 MGD

Total Rainfall: 5.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

June, 2011

Total Flow: 2,155,229 gallons

Average Daily Flow: 0.072 MGD

Total Rainfall: 2.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2011

Total Flow: 1,826,669 gallons

Average Daily Flow: 0.059 MGD

Total Rainfall: 5.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2011

Total Flow: 2,231,926 gallons

Average Daily Flow: 0.072 MGD

Total Rainfall: 24.8 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

September, 2011

Total Flow: 2,920,702 gallons

Average Daily Flow: 0.097 MGD

Total Rainfall: 12.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

October, 2011

Total Flow: 2,962,879 gallons

Average Daily Flow: 0.096 MGD

Total Rainfall: 8.0 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November, 2011

Total Flow: 2,594,355 gallons

Average Daily Flow: 0.086 MGD

Total Rainfall: 1.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2011

Total Flow: 2,287,197 gallons

Average Daily Flow: 0.074 MGD

Total Rainfall: 1.4 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 (3") to six inch (6")

Total Linear feet of pipe: 18,677'

Total number of pump stations: 3

Total Linear feet of pipe cleaned: 9,753'

Total Linear feet of pipe Videoed: 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 2011 was 0.148 mgd, which is 56.9 % of the permitted design flow of the wastewater plant. The facility treated a total of 54,185,496 gallons during the past year. The facility sprayed a total of 41,442,760 gals. There were no violations of the permit limit and no monitoring or reporting violations noted.

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 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 to surface waters facility.

Holly Ridge: Performance

January, 2011

Total Flow: 4,307,390 gals.

Total Sprayed: 2,217,390 gals.

Average Daily Flow: 138,948 gals.

Total Rainfall: 2.32 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

February, 2011

Total Flow: 4,883,710 gals.

Total Sprayed: 4,461,100 gals.

Average Daily Flow: 174,418 gals.

Total Rainfall: 4.81 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

March, 2011

Total Flow: 5,325,890 gals.

Total Sprayed: 3,762,235 gals.

Average Daily Flow: 171,803 gals.

Total Rainfall: 2.02 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2011

Total Flow: 3,851,290 gals.

Total Sprayed: 3,381,460 gals.

Average Daily Flow: 128,376 gals.

Total Rainfall: 2.54 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

May, 2011

Total Flow: 3,683,750 gals.

Total Sprayed: 3,719,075 gals.

Average Daily Flow: 118,831 gals.

Total Rainfall: .08 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

June, 2011

Total Flow: 3,906,915 gals.

Total Sprayed: 3,348,375 gals.

Average Daily Flow: 130,231 gals.

Total Rainfall: 4.80 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2011Total Flow: 3,998,800 gals.Total Sprayed: 3,785,995 gals.Average Daily Flow: 128,994 gals.Total Rainfall: 2.49 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2011Total Flow: 5,204,450 gals.Total Sprayed: 3,134,290 gals.Average Daily Flow: 167,885 gals.Total Rainfall: 15.56 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? YES

On 27 Aug 2011, Due to excessive rainfall from Hurricane Irene, the Effluent spilled over the containment area at the U.V. System. Estimated overflow of 10,000 -15,000 gals. of partially treated Effluent was lost to an unnamed creek behind WWTP.

On 28 Aug 2011, Steve Lewis at the N.C Emergency Management was notified. Sent e-mail to Erin Carey at DWQ Regional Office/ Wilmington for notification.

On 29 Aug 2011, Jim Bushardt and Erin Carey on site to investigate issue. It was assessed that the problem is an engineering design flaw, no operator error.

Rainfall of 8.66" for this event.

September, 2011Total Flow: 5,000,751 gals.Total Sprayed: 2,987,150 gals.Average Daily Flow: 166,692 gals.Total Rainfall: 2.38 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

October, 2011Total Flow: 5,336,500 gals.Total Sprayed: 3,631,420 gals.Average Daily Flow: 172,145 gals.Total Rainfall: 2.25 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November 2011

Total Flow: 4,532,550 gals.

Total Sprayed: 3,293,430 gals.

Average Daily Flow: 151,085 gals.

Total Rainfall: 1.54 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2011

Total Flow: 4,153,500 gals.

Total Sprayed: 3,720,840 gals.

Average Daily Flow: 133,984 gals.

Total Rainfall: .59 in.

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Holly Ridge: 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: 76,560'

Total number of pump stations: 6

Total Linier feet of pipe cleaned: 46,825.6'

Total Linier feet of pipe Videoed: 4,266.5'

Did the Collection System have any monitoring violations? 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



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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 2011 was .026 mgd, which is 79.5 % of the design flow of the wastewater plant. The facility treated a total of 9,943,696 gallons during the year. The plant discharges into Southwest Creek on Blue Creek Road. The Kenwood facility exceeded weekly BOD limits in the months of September and October.

The Kenwood Infrastructure has 9,351 feet of various sizes of piping material and two sewage-pumping stations. A total of 900 feet of pipe was cleaned in 2011, which is 10 % of total pipe. There were no violations of the Kenwood Subdivision Collection System during 2011.

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,2011

Total Flow: 815,250 gallons
Average Daily Flow: .026 gallons
Total Rainfall: 3.6 inches

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

February, 2011

Total Flow: 664,000 gallons
Average Daily Flow: 23,714 gallons
Total Rainfall: 6.4 inches

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

March, 2011

Total Flow: 920,294 gallons
Average Daily Flow: 29,687 gallons
Total Rainfall: 4 inches

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

April, 2011

Total Flow 841,413 gallons
Average Daily Flow: 28,047 gallons
Total Rainfall: 0.7 inches

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

May, 2011

Total Flow: 866,968 gallons
Average Daily Flow: 27,967 gallons
Total Rainfall: 1.9 inches

Did the facility have any monitoring violations? Yes/ Ammonia
Did the facility have any overflows? NO

June, 2011

Total Flow: 765313 gallons
Average Daily Flow: 25,510 gallons
Total Rainfall: 0.9 inches

Did the facility have any monitoring violations? Yes/ Ammonia
Did the facility have any overflows? NO

July, 2011Total Flow: 736,642 gallonsAverage Daily Flow: 24,554 gallonsTotal Rainfall: 2.9 inches

Did the facility have any monitoring violations? Yes

Did the facility have any overflows? NO

August, 2011Total Flow: 975,352 gallonsAverage Daily Flow: 31,462 gallonsTotal Rainfall: 15.3 inches

Did the facility have any monitoring violations? Yes / Daily Limit due to rain/hurricane

Did the facility have any overflows? NO

September, 2011Total Flow: 892,710 gallonsAverage Daily Flow: 29,757 gallonsTotal Rainfall: 2.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

October, 2011Total Flow: 888,921 gallonsAverage Daily Flow: 28,674 gallonsTotal Rainfall: 3.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

November, 2011Total Flow: 825,530 gallonsAverage Daily Flow: 27,451 gallonsTotal Rainfall: 4.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2011Total Flow: 751,303 gallonsAverage Daily Flow: 24,325 gallonsTotal Rainfall: 0.1 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 two pump stations.

Total Linier feet of pipe: 9,351'

Total number of pump stations: 2

Total Linier feet of pipe cleaned: 900'

Total Linier feet of pipe Videoed: 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

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. The average flow received at the plant in **2011** was 0.265 mgd, which is 44.1 % of the design flow at the wastewater plant. The facility treated a total of 95,250,090 gallons during the year. There were violations of exceeding daily fecal coliform limits in the months of April, September, and, October. Flow limits into the infiltration ponds were exceeded in the months of April, August, September, and November. There was one NH3 violation in February.

The Swansboro Infrastructure has 108,956 feet of various sizes of piping material and 22 sewage-pumping stations. A total of 28,287 feet of piping was cleaned in 2011, which is 26 % of the total pipe. There were no violations of the Swansboro Collection System during 2011.

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, 2011

Total Flow: 8,887,000 gallons

Average Daily Flow: .286 MGD

Total Rainfall: 4.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

February, 2011

Total Flow: 9,441,150 gallons

Average Daily Flow: .337 MGD

Total Rainfall: 5.0 inches

Did the facility have any monitoring violations? YES

Exceeded NH3 limit due to mechanical failure.

Did the facility have any overflows? NO

March, 2011

Total Flow: 9,320,710 gallons

Average Daily Flow: .300 MGD

Total Rainfall: 3.6 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

April, 2011

Total Flow: 8,132,160 gallons

Average Daily Flow: .271 MGD

Total Rainfall: 2.2 inches

Did the facility have any monitoring violations? YES

Exceeded (1) daily fecal limit and daily flow limit to infiltration ponds.

Did the facility have any overflows? NO

May, 2011

Total Flow: 7,433,250 gallons

Average Daily Flow: .239 MGD

Total Rainfall: 1.4 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Swansboro: Performance Cont.

June, 2011

Total Flow: 7,188,270 gallons

Average Daily Flow: .240 MGD

Total Rainfall: 1.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2011

Total Flow: 7,428,450 gallons

Average Daily Flow: .239 MGD

Total Rainfall: 2.7 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2011

Total Flow: 7,815,050 gallons

Average Daily Flow: .252 MGD

Total Rainfall: 12.2 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds. Hurricane Irene

Did the facility have any overflows? NO

September, 2011

Total Flow: 8,219,950 gallons

Average Daily Flow: .273 MGD

Total Rainfall: 6.7 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, 2011

Total Flow: 8,056,550 gallons

Average Daily Flow: .259 MGD

Total Rainfall: 1.5 inches

Did the facility have any monitoring violations? YES

Exceeded daily fecal limit.

Did the facility have any overflows? NO

Swansboro: Performance Cont.

November, 2011

Total Flow: 6,485,300 gallons

Average Daily Flow: .216 MGD

Total Rainfall: 2.7 inches

Did the facility have any monitoring violations? YES

Exceeded flow limits to Infiltration Ponds.

Did the facility have any overflows? NO

December, 2011

Total Flow: 6,852,250 gallons

Average Daily Flow: .221 MGD

Total Rainfall: 1.1 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: 22

Total Linier feet of pipe cleaned: 28,287'

Total Linier feet of pipe Videoed: 0'

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO



Onslow Water & Sewer Authority

www.onwasa.com

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 2011 was 0.0059 million gallons per day (MGD), which is 26.3 % of the design flow at the wastewater plant. The facility treated a total of 2,132,800 gallons (Gals.) during the year. The Plant had sampling violations in the months of January, February, March, April, Note; The plant had periods of no flow and sampling was not required.

The Hickory Grove infrastructure has 1,960 linear feet (L.F.) of various size pipe materials. A total of 1,960 L.F. of piping was cleaned in 2011, which is 100 % of the total collection system piping. There were no violations of the Hickory Grove Collection System during 2011.

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, 2011

Total Flow: 393,000 gallons

Average Daily Flow: .012 MGD

Total Rainfall: 3.8 inches

Did the facility have any monitoring violations? YES

Exceeded Daily BOD limit

Did the facility have any overflows? NO

February, 2011

Total Flow: 364,000 gallons

Average Daily Flow: .013 MGD

Total Rainfall: 3.5 inches

Did the facility have any monitoring violations? YES

Exceeded BOD and fecal coliform limits

Did the facility have any overflows? NO

March, 2011

Total Flow: 313,100 gallons

Average Daily Flow: .010 MGD

Total Rainfall: 2.7 inches

Did the facility have any monitoring violations? YES

Exceeded Monthly BOD limit.

Did the facility have any overflows? NO

April, 2011

Total Flow: 465,000 gallons

Average Daily Flow: .015 MGD

Total Rainfall: 1.65 inches

Did the facility have any monitoring violations? YES

Exceeded monthly BOD limit.

Did the facility have any overflows? NO

May, 2011

Total Flow: No Flow gallons

Average Daily Flow: 0.0 MGD

Total Rainfall: 0 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Hickory Grove: Performance

June, 2011

Total Flow: No Flow gallons

Average Daily Flow: 0.0 MGD

Total Rainfall: 2.2 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

July, 2011

Total Flow: No Flow gallons

Average Daily Flow: 0.0 MGD

Total Rainfall: 1.5 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

August, 2011

Total Flow: No Flow gallons

Average Daily Flow: 0.0 MGD

Total Rainfall: 14.08 inches

Did the facility have any monitoring violations? NO

Hurricane Irene

Did the facility have any overflows? NO

September, 2011

Total Flow: 297,000 gallons

Average Daily Flow: 0.009 MGD

Total Rainfall: 4.15 inches

Did the facility have any monitoring violations? YES

Exceeded fecal coliform, TSS, and dissolved oxygen

Did the facility have any overflows? NO

October, 2011

Total Flow: 300,700 gallons

Average Daily Flow: .009 MGD

Total Rainfall: 3.0 inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

Hickory Grove: Performance

November, 2011

Total Flow: _____ No Flow _____ gallons

Average Daily Flow: _____ 0.0 _____ MGD

Total Rainfall: _____ 2.4 _____ inches

Did the facility have any monitoring violations? NO

Did the facility have any overflows? NO

December, 2011

Total Flow: _____ No Flow _____ gallons

Average Daily Flow: _____ 0.0 _____ MGD

Total Rainfall: _____ 0.7 _____ inches

Did the facility have any monitoring violations? NO

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: 1,960

Total number of pump stations: 0

Total L.F. of pipe cleaned: 1,960

Total L.F. of pipe televised: _____

Did the Collection System have any monitoring violations? NO

Did the Collection System have any overflows? NO
