

**2009-2010 ANNUAL PERFORMANCE REPORT  
CAROLINA SHORES WASTEWATER TREATMENT PLANT  
NPDES PERMIT #NC0044873**

**GENERAL INFORMATION:**

Carolina Shores Wastewater Treatment Plant (WWTP)

NPDES NO. NC0044873

COUNTY OF BRUNSWICK, PUBLIC UTILITIES DEPARTMENT

DONALD DIXON, SCOTT LEONARD, OPERATORS IN RESPONSIBLE CHARGE

**I. DESCRIPTION OF TREATMENT PROCESS:**

Plant is permitted to treat an average daily flow of 530,000 gallons or 0.53 MGD (Million Gallons per Day) of wastewater. The plant is located in Carolina Shores and treats waste from the town, some of the downtown Calabash area, and some outlying subdivisions along the Highway 17 corridor. This facility discharges into an unnamed tributary of Persimmon Swamp of the Lumber River Basin.

**II. TREATMENT PLANT PERFORMANCE:**

The Carolina Shores WWTP treated approximately 172,454,000 gallons from July 2009 through June 2010. The facility's average daily flow for the performance period was .473 MGD. The facility's average daily flow was 89% of the permitted flow. The facility completed construction and placed into service a sewer force main to divert approximately 80,000 gallons a day of flow from the Carolina Shores facility to the Sea Trail WWTP collection system. This flow diversion project was completed in March 2010. Although the facility has been non-compliant, since the project was completed the percentage over established limits has been significantly reduced. Facility is also undergoing an engineering study on further ways to improve performance and meet compliance parameters.

The Month with the Highest Flow Avg. was Feb 2010: Avg. Daily Flow of .600 MGD

The Month with the Lowest Flow Avg. was Sept. 2007: Avg. Daily Flow of .328 MGD

The following is a month-by-month list of permit violations for FY 09-10:

**Month-By-Month Description of Permit Violations**

Oct, Nov 09 Monthly BOD Limit

Dec 09 Monthly BOD, Flow

Jan, Feb 10 Monthly BOD, NH3, TSS, Flow

Mar 10 Monthly BOD, Flow

May 10 Monthly NH3, TSS

June 10 Monthly NH3

**III. NOTIFICATION:**

This report will be posted on the County's Web site at [www.brunswickcountync.gov](http://www.brunswickcountync.gov) under Utilities and published in *The Brunswick Beacon* and *The State Port Pilot*.

**IV. CERTIFICATION:**

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.

Donald Dixon  
Wastewater Superintendent  
County of Brunswick  
Public Utilities Department  
July 21, 2010