

Tar-Pamlico River Basin 2013 Basinwide Assessment Report Whole Effluent Toxicity Program 2008-2012

The Division of Water Resource's Whole Effluent Toxicity Monitoring Program

Acute and/or chronic toxicity tests are used to determine toxicity of discharges to sensitive aquatic species (usually fathead minnow, *Pimephales promelas* or the water flea, *Ceriodaphnia dubia*). Results of these tests have been shown by researchers to be predictive of discharge effects to receiving stream populations.

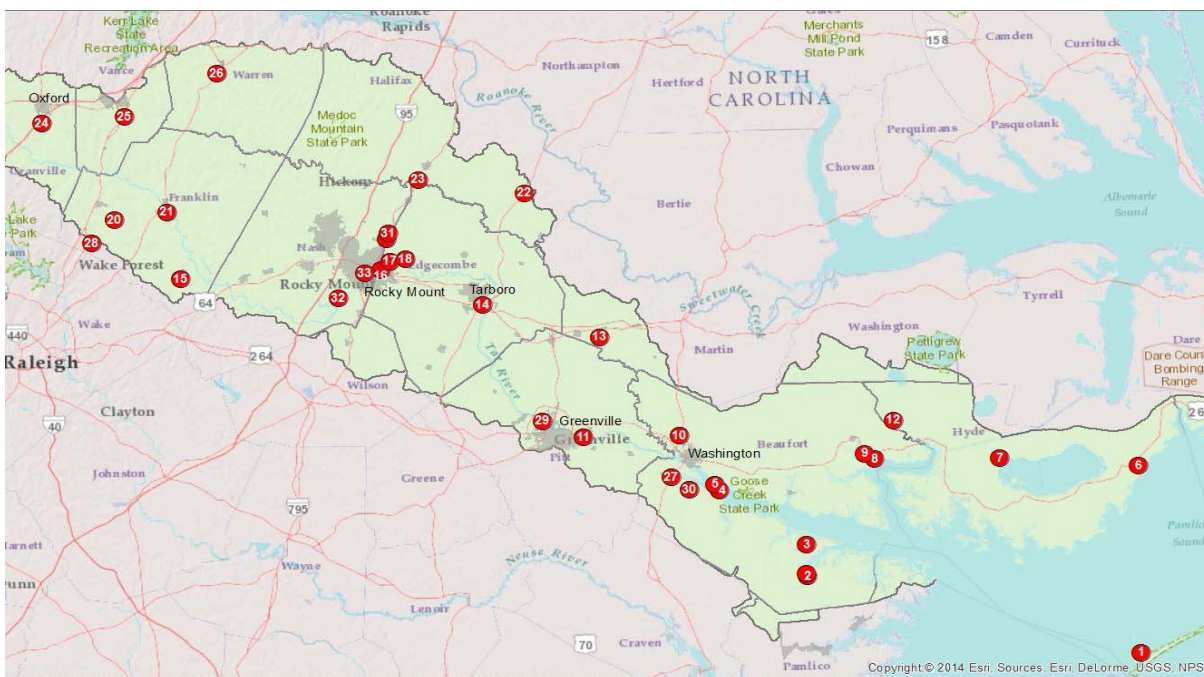
Many facilities are required to monitor whole effluent toxicity (WET) by their NPDES permit. Facilities without monitoring requirements may have their effluents evaluated for toxicity by DWR's Aquatic Toxicology Laboratory. If toxicity is detected, DWR may include aquatic toxicity testing upon permit renewal.

DWR's Aquatic Toxicology Unit maintains a compliance summary for all facilities required to perform tests and provides a monthly update of this information to Regional Offices and DWR administration. Ambient toxicity tests can be used to evaluate stream water quality relative to other stream sites and/or a point source discharge.

WET Monitoring in the Tar-Pamlico River Basin – 2008-2012

Thirty-four facility permits in the Tar-Pamlico River basin currently require WET monitoring (Figures 1a and 1b). While twenty-five facility permits have a WET limit, fourteen facilities do not have a permitted WET limit but are required to monitor their discharge. Some of these facilities have more than one permit because they have multiple outfalls. While the majority of facilities in this basin have been consistently in compliance, there have been a few instances of exceedances among the dischargers. All follow-up tests for the initial failures were compliant.

Figure 1. Tar-Pamlico River basin facilities required to conduct whole effluent toxicity testing



Key

1	Ocracoke Sanitary District (RO) WTP	13	Robesonville	25	Saint-Gobain Containers(Ball Foster)
2	Aurora WWTP	14	Tarboro WWTP	26	Warren Co WWTP
3	PCS Phosphate Company, Inc.	15	Bunn WWTP	27	Edgewood Dr WTP
4	Beaufort Co.- Richland WTP	16	Conoco Philips	28	Franklinton Co WTP
5	Washington Regional WTP	17	Battleboro Plant-Edgecombe Genco LLC	29	Greenville WTP
6	Engelhard (RO) WTP	18	Rocky Mount/Tar River Regional WWTP	30	Hill Rd WTP
7	Hyde County Fairfield (RO) WTP	19	Ingersoll-Rand/Schlage Corp.	31	Hospira
8	Belhaven WWTP	20	Franklin Co. WASA	32	Tar River WTP
9	Belhaven(RO) WTP	21	Louisburg WWTP	33	Sunset Ave WTP
10	Washington WWTP	22	Scotland Neck WWTP	34	Richlands WTP
11	Greenville WWTP	23	Enfield WWTP		
12	Hyde County Ponzer (RO) WTP	24	Oxford WWTP		