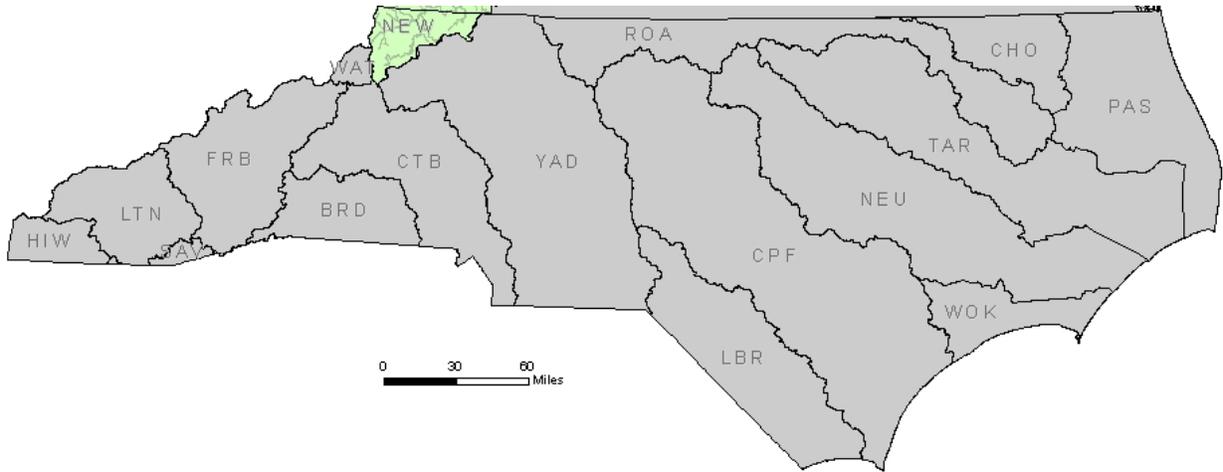


New River Basin  
Basinwide Assessment Report  
Whole Effluent Toxicity Program  
2004-2008



## The Division of Water Quality'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 minnows 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.

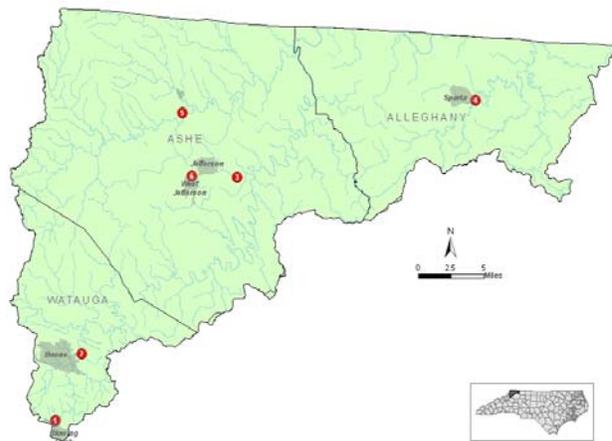
Many facilities are required to monitor whole effluent toxicity (WET) by their NPDES permit. Facilities without monitoring requirements may have their effluents evaluated for toxicity by DWQ's Aquatic Toxicology Laboratory. If toxicity is detected, DWQ may include aquatic toxicity testing upon permit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

DWQ'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 WQ 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 New River Basin – 2004-2008

Six facility permits in the New River basin currently require whole effluent toxicity (WET) monitoring (Figure 1 and Table 1). All six facility permits have a WET limit.

**Figure 1. New River basin facilities required to conduct whole effluent toxicity testing**



**Table 1. Facilities in the New River basin required to perform whole effluent toxicity testing.**

HUC/Facility	NPDES Permit No.	Receiving Stream	County	Flow (MGD)	IWC (%)	7Q10 (cfs)
<b>05050001</b>						
Blowing Rock WWTP	NC0027286/001	M./S. Fork New R.	Watauga	0.8	61	1.0
Boone WWTP	NC0020621/001	S. Fork New R.	Watauga	4.8	44	9.5
Jefferson WWTP	NC0021709/001	Naked Cr.	Ashe	0.3	14	2.2
United Chemi-Con	NC0000019/001	N. Fork New R.	Ashe	0.2	1.0	41
West Jefferson WWTP	NC0020451/001	UT Little Buffaloe Cr.	Ashe	0.5	45	1.0
Sparta WWTP	NC0026913/001	Little R.	Alleghany	0.6	9.0	9.9

The numbers of facilities in this small basin have remained the same since 2004. The compliance rates of these facilities have been 100% over the last 5 years. No facilities in this basin have encountered problems with WET compliance.