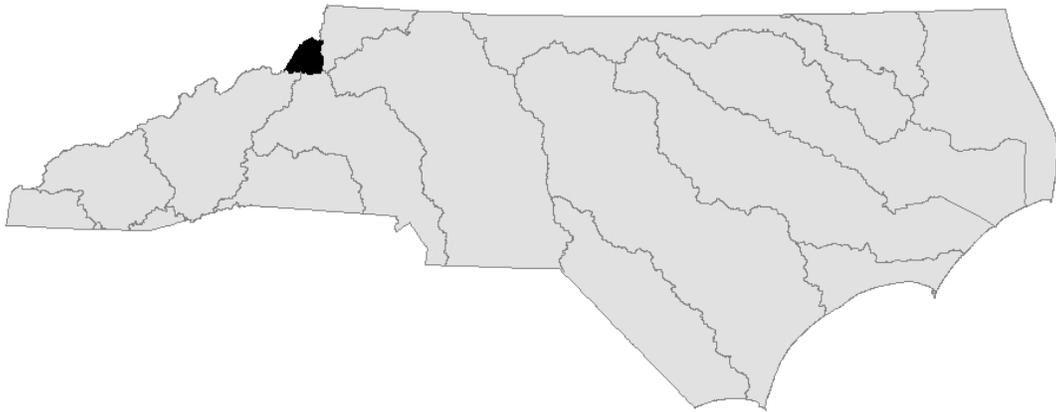


Watauga River Basin
Basinwide Assessment Report
Whole Effluent Toxicity Program

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 Watauga River Basin – 2004-2008

Two facility permits in the Watauga River basin require whole effluent toxicity (WET) monitoring (Figure 1 and Table 1)

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

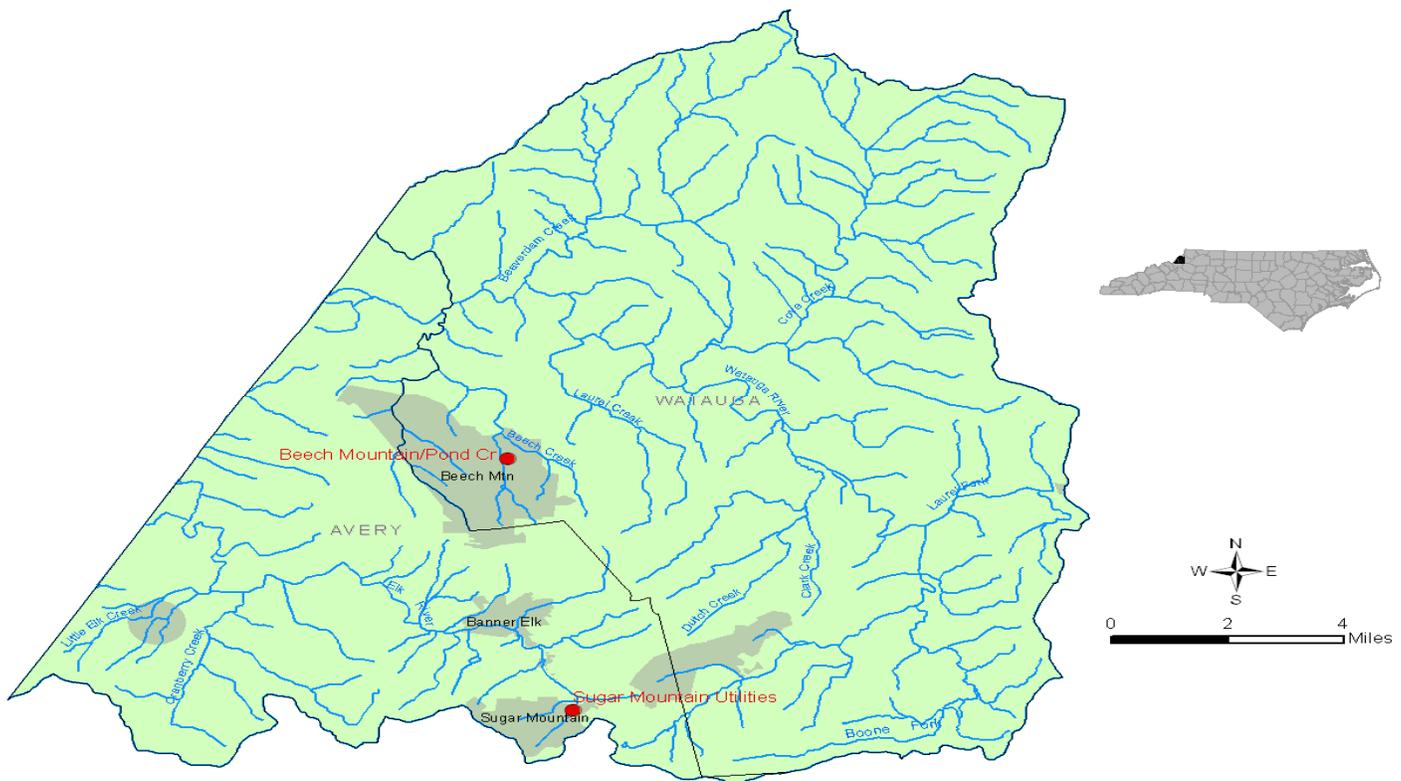


Table 1. Watauga River basin facilities required to conduct whole effluent toxicity testing

HUC/Facility	NPDES Permit No.	Receiving Stream	County	Flow (MGD)	IWC (%)	7Q10 (cfs)	2004- 2008 Passes	2004- 2008 Fails
06010103								
Beech Mountain/Pond Creek	NC0069761/001	Pond Cr.	Watauga	0.4	51	0.06	22	1
Sugar Mountain Utilities	NC0022900/001	Flattop Cr.	Avery	0.50	72.0	0.30	20	0

The Beech Mountain WWTP has passed all but one test during this 5 year basin cycle for the period 2004 through 2008. They passed the two additional tests following the failure and was compliant for the quarter. Sugar Mountain Utilities has passed all tests during this 5 year period.