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 impacts 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 require aquatic toxicity testing upon permit renewal.

DWR’s Aquatic Toxicology Branch 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. The two facilities that discharge within the Watauga River Basin were compliant the vast majority of the time for the 5-year basin cycle for the period of 2009-2013.

**WET Monitoring in the Watauga River Basin – 2009-2013**

Two facility permits in the Watauga River basin require whole effluent toxicity (WET) monitoring:

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

The Pond Creek WWTP has passed all but two test during this 5-year basin cycle for the period 2009 through 2013. Sugar Mountain Utilities has passed all but 4 tests during this 5-year period. All follow-up tests for the initial failures were compliant.