



Boone Wastewater Treatment Plant
Boone, North Carolina

In 1992, Hobbs, Upchurch & Associates, P.A. began to review and plan a wastewater treatment facility expansion for the Town of Boone. The Town operated a high-rate trickling filter facility, and experienced problems associated with failing equipment, as well as increased hydraulic loading.

The Town of Boone faced several hurdles in its efforts to improve treatment, such as its discharge to a tributary of the New River, which called for extremely tight effluent limitations. In addition, there were several operational considerations and challenges, such as the climate of Boone and the mountainous, geographical location in which new plant structures were constructed. Construction phasing was a major consideration, because the new secondary and tertiary units had to be installed concurrently with the demolition of the existing trickling filters.

Construction of the \$14 million WWTP upgrade finished well ahead of schedule despite having to demolish most of the old plant while constructing new treatment units and maintaining compliance with SOC limits for the effluent. **This project received a 1999 Engineering Excellence Grand Award from the American Council of Engineering Companies of North Carolina.**