

## Baker Creek Water Quality Improvement

Baker Creek is one of the larger streams flowing into the downstream half of Tellico Lake. Headwaters initiate in the outskirts of Maryville, TN, and flow about 18 miles to the mouth adjacent to the Foothills Pointe community where it empties into Tellico Lake. About 75% of the watershed is in Blount Co. and the downstream 25% is in Loudon Co. Like almost all streams in this part of the Tellico Lake Watershed, it is classified as polluted by excess concentrations of nitrogen, phosphorus, and E coli bacteria from small farms, and from inefficient operation of septic systems of small scattered homes and communities.

WATeR has been supporting the Blount Co. Soil Conservation District (SCD) to implement a series of cost-share grants from the TN Department of Agriculture (TDA) since 2010. Throughout the past eight years, the SCD has distributed more than \$600 K to assist farmers to install Best Management Practices (BMPs) and repair septic systems for rural homeowners throughout the watershed in both Blount and Loudon Counties. WATeR contributed by conducting the quarterly planning meetings for watershed partners and by collecting water quality samples in conjunction with the TN Department of Environment & Conservation.

The following photograph from the 2015 SDA progress report to the TDA shows a successful project that eliminated unhealthy conditions for livestock while improving water quality in a tributary of Baker Creek:



**Before:** Full Livestock Access to Centenary Creek with Eroded Streambanks and no Riparian Buffer.



**After:** Riparian Buffer Established (naturally) in conjunction with Access Control Fence and Access Ramp.

Water quality samples collected in Baker Creek and tributaries in 2013 showed improvements when compared with similar data from 2008. Even greater improvements are anticipated when data collected in 2018 are published. Soon at least portions if not all of Baker Creek can be removed from the list of polluted streams flowing into Tellico Lake.