

Summary of Findings & Recommendations for the Ararat Local Watershed Plan [Surry County, Yadkin 03040101]

The Ararat Local Watershed Plan (LWP) was conducted over two discrete time periods. The initial LWP effort was intended as a one-year “fast track” to help deliver projected mitigation needs in 2008. The initial LWP included nine 14-digit hydrologic units (HUs) covering 235 square miles in eastern Surry County (the entirety of the Ararat River drainage in North Carolina). This effort produced a [Technical Memorandum](#) in late 2008 and a preliminary Project Atlas (unpublished) in early 2009 that identified 20 priority subwatersheds for various categories of watershed projects. The LWP effort was re-started in early 2011 with a subset of the initial stakeholder team, including representatives from Surry Soil & Water Conservation District (SWCD), Surry County Planning, Surry County Park & Recreation, Town of Pilot Mountain, Piedmont Land Conservancy, Piedmont Triad Regional Council, NC DENR Public Water Supply, Pilot View RC&D, NC Division of Water Quality (now the Division of Water Resources), NC Division of Forest Resources, and NC Division of Parks (Pilot Mountain State Park). The re-started effort focused on a 50-square mile study area covering the Toms Creek, Heatherly Creek, Chinquapin Creek and Pilot Creek subwatersheds in the vicinity of the Town of Pilot Mountain. These subwatersheds comprise one 14-digit HU (03040101110030) and part of a second HU (03040101110050).

Major land uses within the Ararat-Pilot Mountain LWP area include a mix of developed (urban/suburban, including the Town of Pilot Mountain), agricultural, and forested (including a large portion of Pilot Mountain State Park within the upper Pilot Creek subwatershed). Most of Toms Creek (and major tributaries) upstream of U.S. Highway 52 are water supply (WS) waters, supplying the Town of Pilot Mountain. Within the Heatherly Creek subwatershed (a tributary to lower Toms Creek that includes most of the town limits), impervious cover exceeds 10%, resulting in stormwater-related impacts to water quality and aquatic habitat. In 2012, the lowermost section (1.4 miles) of Heatherly Creek was on the 303(d) list of impaired waters due to impacted benthos. Nearly 16 miles of the lower Ararat River was on the 2012 list for turbidity violations.

The re-started (2011) LWP effort included extensive biological and physical/chemical water quality monitoring within the 50-square mile study area, as well as GIS- and field-based assessment of stream and riparian buffer conditions. The *Watershed Assessment Report* was completed in February 2013. Potential project sites for stream and buffer restoration, wetland restoration/enhancement, and urban stormwater BMPs were identified through GIS analysis (aerial photography). The most promising project sites were investigated in the field, then included in the LWP [Project Atlas](#) (May 2013). The final Ararat-Pilot Mountain *Watershed Management Plan* was completed in December 2013.

The major stressors of water quality and habitat functions identified within the Ararat-Pilot Mountain LWP study area, and the recommended management strategies to address them, are summarized in Table 1 below. For additional information, see the Ararat-Pilot Mountain [Watershed Assessment Report](#) and the Ararat-Pilot Mountain [Watershed Management Plan](#).

Table 1. Key watershed stressors and recommended management strategies for the Ararat-Pilot Mountain LWP.

Major Stressors	Management Strategies
Erosion and sedimentation (excess sediment in streams)	Stream, buffer and wetland restoration/enhancement projects, including agriculture/forestry BMPs (e.g., livestock exclusion); urban/suburban stormwater BMPs; stream, buffer and wetland preservation (esp. in headwater tributaries)
Missing or degraded riparian buffers	Stream, buffer and wetland restoration/enhancement projects, including ag/forestry BMPs; stream, buffer and wetland preservation; farmland protection and timber management plans
Stormwater runoff	Urban/suburban stormwater BMPs; county/town Stormwater Management Plan; greenways planning
Nutrient and fecal coliform “hot spots”	Stream, buffer and wetland restoration/enhancement, including ag/forestry BMPs (especially livestock exclusion + alternate watering); farmland protection planning; stormwater management planning; illicit discharge monitoring/detection and remediation (leaks, spills, overflows from sewer lines and septic systems)
All the above	Local stormwater education/outreach program(s); <i>Source Water Protection Plan</i> development (Toms Creek – Town of Pilot Mountain); farmland protection planning and education/outreach.