

Summary of Findings and Recommendations for the Cove Creek Local Watershed Plan

The Cove Creek Local Watershed Plan (LWP) area is 80 square miles and is located in Rutherford, McDowell, and Buncombe Counties. The Cove Creek watershed is in the foothills of the Southern Appalachians, includes the hydrologic units 03050105040040 (upper Cove Creek), 03050105040050 (Bills Creek), and 03050105040060 (Cedar Creek), and is characterized by a rural landscape. Cedar Creek and the upstream half of Cove Creek and their tributaries are classified as C Trout waters, but the downstream half of Cove Creek and most of its tributaries are classified as C waters. The majority of the watershed is forested, but most of the lower gradient bottomlands, through which Cove Creek and some of its tributaries run, are used for pasture, hay, and homes. No streams in the Cove Creek LWP area are on North Carolina's 2006 303(d) list of impaired waters.

The Cove Creek LWP effort began in 2006 and was completed in 2007. Its objectives were to develop a fast-track watershed characterization and restoration strategy for the Cove Creek watershed. This abbreviated effort was not a traditional 3-phased LWP; the watershed characterization was based on GIS analysis of land use, buffer integrity, and recent aerial photographs and field data limited to assessment of channel and in-stream habitat integrity at potential restoration sites. No new water quality data were collected. Stakeholder involvement consisted of several meetings with McDowell and Rutherford County Natural Resource Conservation Service and Soil and Water Conservation District technical staff.

Forested headwater streams are in relatively good condition, but streams running through lower gradient bottomlands have degraded in-stream habitat and are often unstable. Cove Creek itself suffers from severe bank erosion; in many areas, its channel is incised and lacks a woody buffer. Primary stressors for the watershed are stream incision of Cove Creek, inadequate riparian buffers, sedimentation, stream bank erosion, livestock access, and possible nutrient enrichment. The greatest threat to stream integrity is development and consequent increases in sedimentation, nutrients, and stormwater. This area is attractive to second home and retirement communities; land prices have skyrocketed, and some larger forested tracts have recently been sold.

Key stressors for streams in the Cove Creek watershed and management strategies to address them are listed in the Table 1. Management strategies needed to restore and protect stream health include stream and wetland restoration, buffer planting, agriculture, forestry, and stormwater best management practices, and education.

Table 1. Key watershed stressors and management strategies for the Cove Creek watershed

Stressors and Issues	Management Strategies
Stream incision—Cove Creek	Stream restoration
Lack of adequate forested buffer	Riparian buffer restoration and protection, wetland restoration in adjacent floodplain
Sedimentation	Stream restoration, riparian buffer restoration, various agricultural, forestry, and residential BMPs (see list in plan)
Stream bank erosion	Stream restoration, riparian buffer restoration, livestock exclusion, stream crossing stabilization
Livestock access to streams	Livestock exclusion and BMPs
Possible nutrient enrichment	Livestock exclusion, riparian buffer restoration, various residential and golf course BMPs (see list in plan)
Development	Land use planning and regulations, education