# Watershed Approach

Few habitats in Southern Appalachian forests have suffered such dramatic species loss and decline as our streams and rivers; aquatic species are the most threatened of all species groups in the Southeast. Rivers that flow from the Cherokee National Forest are some of the most biologically rich waters in the world. Clearly, protecting the headwaters of the Cherokee National Forest is a necessity if we are to protect the aquatic diversity of the region. While intact watersheds are clearly needed to protect aquatic life and to provide habitat and corridors for movement of terrestrial species, they also provide clean drinking water for human populations.

The U.S. Department of Agriculture (USDA) Strategic Plan for FY 2010–2015 targets the restoration of watershed and forest health as a core management objective of the national forests and grasslands. To achieve this goal, the Forest Service, an agency of USDA, is directed to restore degraded watersheds by strategically focusing investments in watershed improvement projects and conservation practices at the landscape and watershed scales.

The Watershed Condition Framework (WCF) is a comprehensive approach for classifying watershed condition, proactively implementing integrated restoration in priority watersheds on national forests and grasslands, and tracking and monitoring outcome-based program accomplishments for performance accountability. (more information about the WCF can be found in Appendix G.)

The most effective way to approach complex ecological issues is to consider them at the watershed level, where the fundamental connection among all components of the landscape is the network of streams that defines the watershed. Watersheds are easily identified on maps and on the ground, and their boundaries do not change much over time. Watersheds are also readily recognized by local communities and resonate with members of the public as a logical way to address resource management issues.

Watersheds are integral parts of broader ecosystems and can be viewed and evaluated at a variety of spatial scales. Because watersheds are spatially located landscape features uniformly mapped for the entire United States at multiple scales, they are ideal for tracking accomplishments both in terms of outputs (acres treated on the ground) and outcomes (improvement in watershed condition class). To avoid double counting, we report accomplishments and outcomes by each watershed's unique hydrologic unit code (HUC). A watershed's condition class integrates the effect of all activities within a watershed; therefore, watersheds provide an ideal mechanism for interpreting the cumulative effect of a multitude of management actions on soil and hydrologic function. Finally, many hydrologic and aquatic restoration issues can be properly addressed only within the confines of watershed boundaries. Watersheds provide an excellent basis for developing restoration plans that can treat a multitude of resource problems in a structured, comprehensive manner.

The Steering Committee recommends:

1) The Forest Service should continue to plan restoration projects at the watershed scale. The Committee also recommends that the watersheds are the most appropriate scale at which to measure success of restoration.

2) The Forest Service currently works to reintroduce and augment populations of aquatic species where appropriate. The Steering Committee encourages these efforts and would seek to increase them when possible.