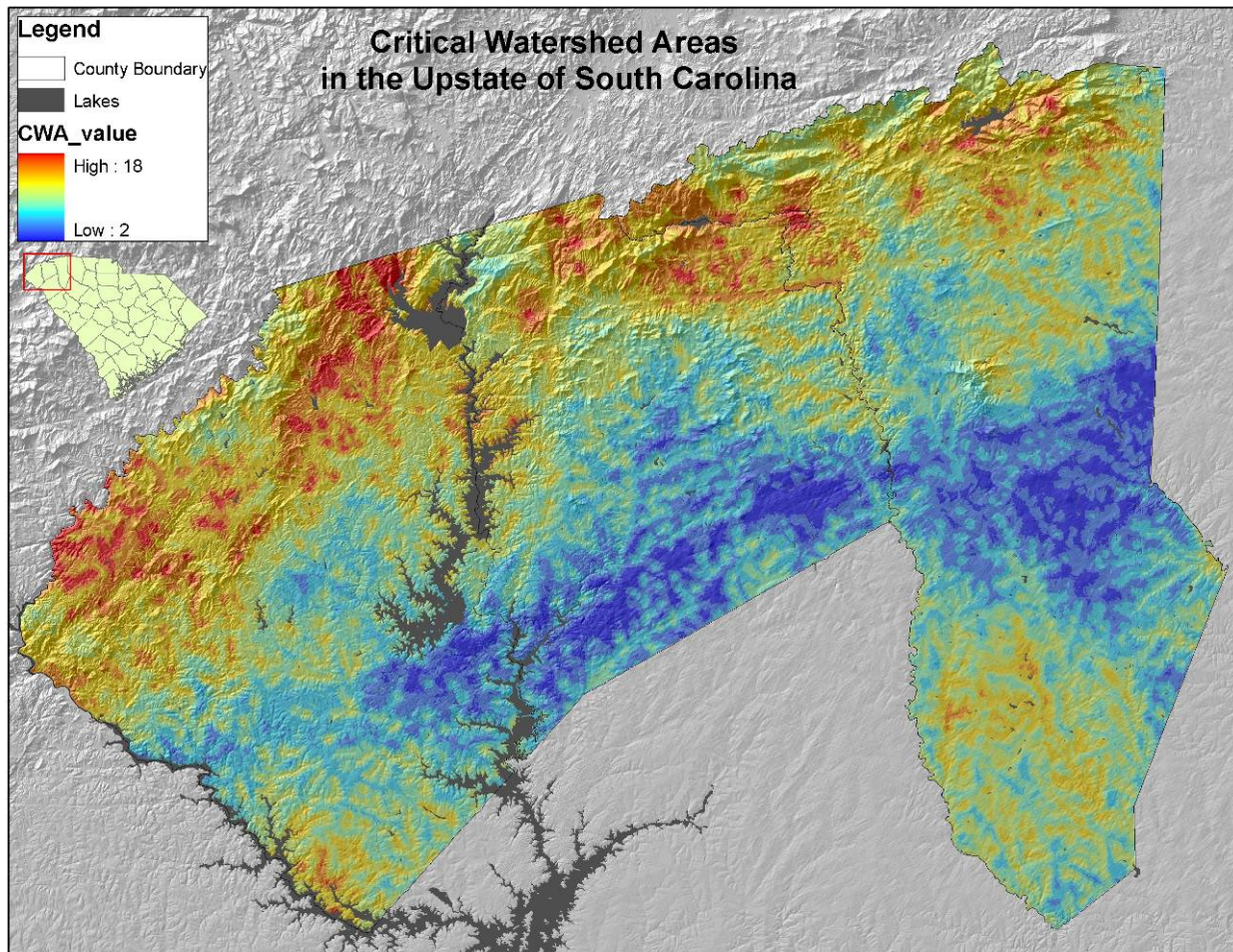


IDENTIFYING CRITICAL WATERSHED AREAS IN THE UPSTATE OF SOUTH CAROLINA

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Recognizing the wide-ranging ecological, economic, and anthropological importance of healthy mountain streams, Upstate Forever’s Rural Waters program created an ArcGIS model to identify land in South Carolina’s mountain region that could have the largest negative impact on water quality if disturbed or developed in an irresponsible way. The three-part, customizable model compiles many types of data layers and converts them all into raster datasets of equally sized cells. Then, each cell of every raster is assigned a value based on its potential influence on water quality. Finally, the raster layers are stacked and added, providing a “Critical Watershed Area (CWA)” value for every cell in the landscape. Cells with higher values are considered more critical to water quality. Using a combination of the CWA value and the relative threat of development, land can be prioritized for conservation efforts. For the full report, including prioritization maps, please contact lgarrett@upstateforever.org.



High values (red and yellow colors) represent areas where preserving the integrity of the land is very critical to maintaining high water quality.