Former studies have shown that once compacted, forest soils often recover slowly (many decades) to pre-disturbed levels for soil properties such as bulk density or penetrometer resistance. This study was conducted to evaluate the effects of selected harvesting techniques on soil physical and hydraulic properties. The effects of logging roads, log landing areas, and logged areas on water retention, saturated hydraulic conductivity (KSat), pore size distributions, and bulk density were investigated on harvested sites within the Mark Twain National Forest in Callaway County, Missouri on a moderately well-drained Keswick soil (fine, smectitic, mesic Aquertic Chromic Hapludalfs). Bulk density was significantly higher (P<0.01) and Ksat was significantly lower (P<0.01) for the logging road and log landing areas compared to the logged areas. No statistical differences in property values among treatments occurred at the deepest sampling depth (40 cm). From this study, the methods used in logged areas appear to have caused small changes to soil physical and hydraulic properties; however, significant changes occurred with these properties for logging roads and log landing areas.