

Illinois Geophysical Surveys - During the period of 8 to 12 April, Jim Doolittle, Research Soil Scientist, from the NSSC's Soil Survey Research and Laboratory Staff assisted the Illinois NRCS Staff and MLRA 115C soil scientists characterize the variability of soil properties across several reclaimed surface-mined areas located in Fulton County, Illinois. The objectives of this research are to assess spatial differences in soil properties that affect land use and to improve interpretations of soil materials that have been excavated, replaced, and graded during surface mining operations. Reclaimed surface-mined areas are used as croplands, pastures, forest lands, fish and wildlife sanctuaries, and industrial, commercial and residential sites. According to Illinois laws, the reclaimed soils must be restored to row cropland capability based on the characteristics of the soil. In this study, spatial variations in soil properties are inferred and mapped using electromagnetic induction methods and the analysis of samples extracted from soil cores.