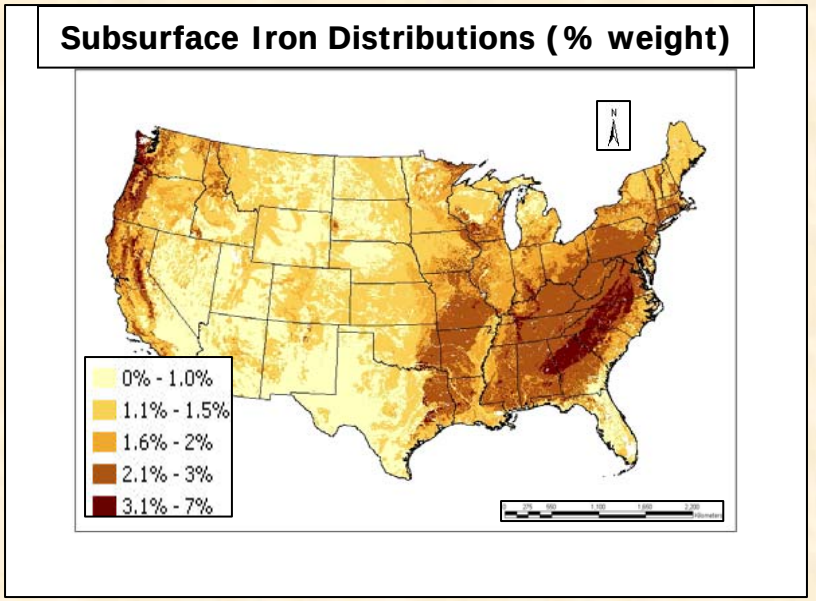
# Regional Scale Assessment of the Organic C Sequestration Potential in Deep Subsurface Soils

- **Quantify the relationship between soil organic C sequestration and soil physical, hydrological, and geochemical properties, and develop a geographical method for estimating the carbon storage capacity of subsurface soils within the United States.**
- **Organic C pools in subsoils (B and C horizons) are much less dynamic due to mineral stabilization, where turnover times are estimated at millennia and longer.**
- **Results will identify regions and field sites that offer the greatest potential for enhanced subsurface organic C storage and thus most deserving of manipulation or improved management.**
- **The United States framework could be extended globally.**


**Oak Ridge National Laboratory**
**U.S. Department of Energy**

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## Accomplishments

**Improved conceptual understanding and predictive capability of the processes controlling subsurface organic C sequestration.**

**Development of a statistically rigorous, geographically-based method for estimating the carbon storage capacity of deep subsurface soils within the United States.**

**Identification of regions and field sites which offer the greatest potential for enhanced subsurface organic C storage and thus most deserving of manipulation or improved management.**