

# CEAP Empirical Bayesian Predictions

- Response variable  $y^*$  : soil loss from **crop** fields as measured by the Revised Universal Soil Loss Equation (RUSLE2).
- Auxiliary variables required for the full population.
  - ▶ covariates: rainfall, soil properties, crop coverage, ...
  - ▶ public data sources: National Cooperative Soil Survey and USDA National Agricultural Statistics Service Cropland Data Layer (CDL).
- Overlay polygons representing Soil Survey mapunits onto the CDL to
  - ▶ define population frame: a list of soil mapunit crop segments
  - ▶ collect auxiliary information

# Visualization

