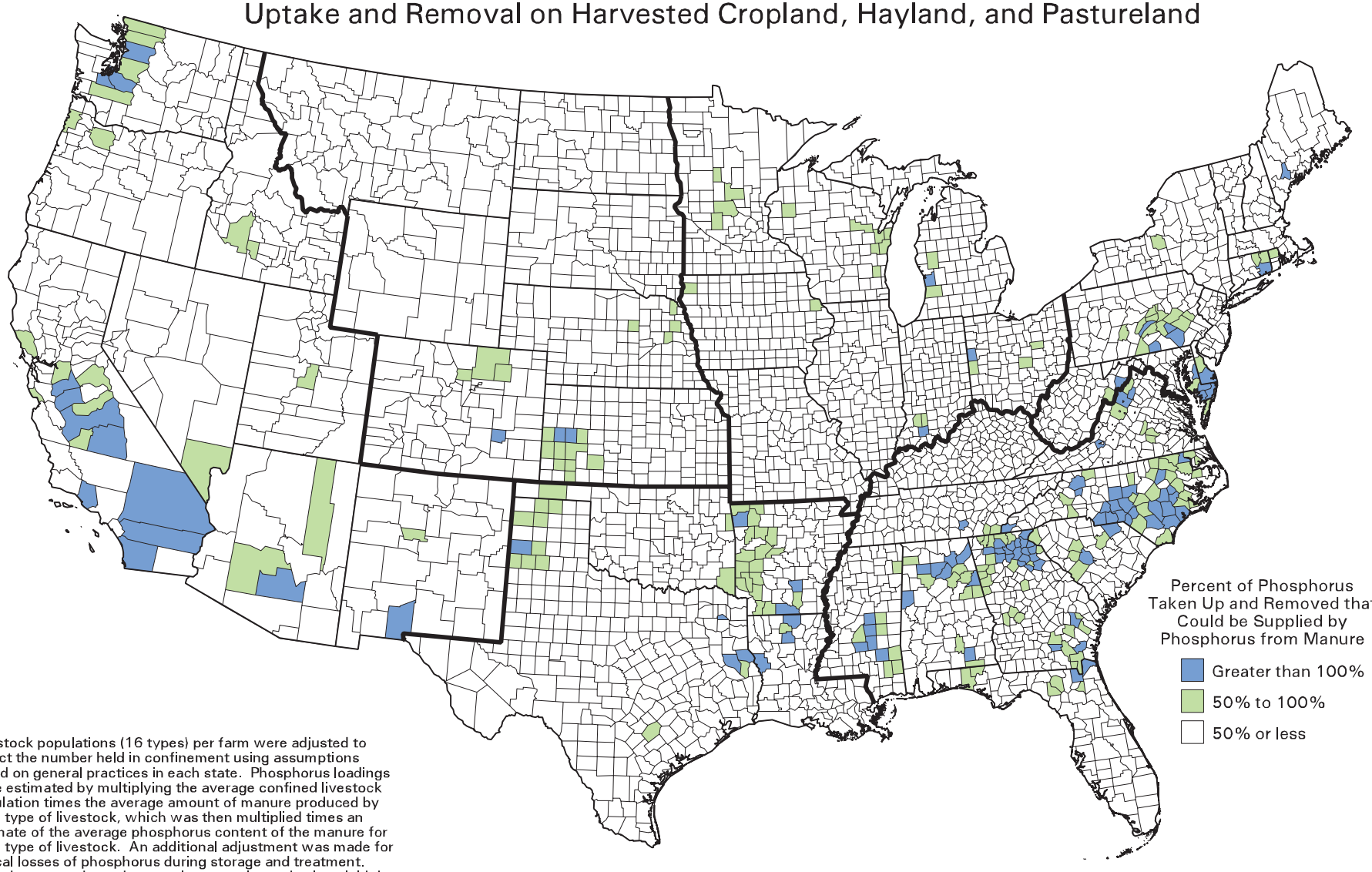
Map 8: Potential for Phosphorus Available from Animal Manure to Meet or Exceed Plant Uptake and Removal on Harvested Cropland, Hayland, and Pastureland



Livestock populations (16 types) per farm were adjusted to reflect the number held in confinement using assumptions based on general practices in each state. Phosphorus loadings were estimated by multiplying the average confined livestock population times the average amount of manure produced by each type of livestock, which was then multiplied times an estimate of the average phosphorus content of the manure for each type of livestock. An additional adjustment was made for typical losses of phosphorus during storage and treatment. Phosphorus uptake and removal were estimated using yield data and estimates of the percent phosphorus content in the harvestable portion of the crop. The ratio of phosphorus available in manure to the amount that could be taken up and removed by crops grown in the county is shown in the map. It was assumed that all cropland, hayland, and pastureland in the county were available for manure utilization. No adjustment was made for application of commercial fertilizer.

Data Source: Census of Agriculture, 1992.
This analysis has only been run for the contiguous 48 states. Alaska, Hawaii, Puerto Rico, U.S. Virgin Islands, and Pacific Basin data were not incorporated in the study. Citrus, Vegetable, and Nut Crops have been excluded from this analysis.

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