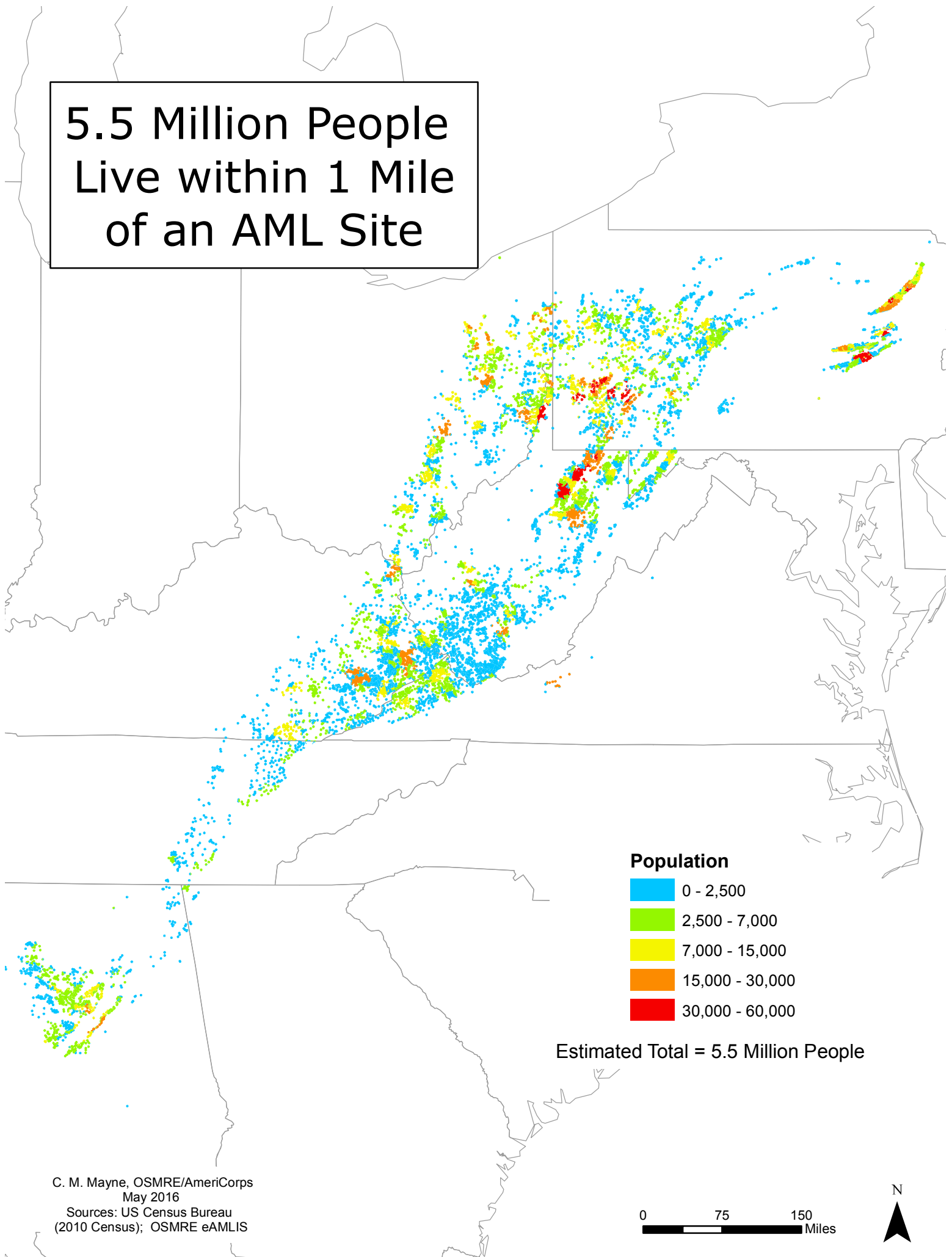
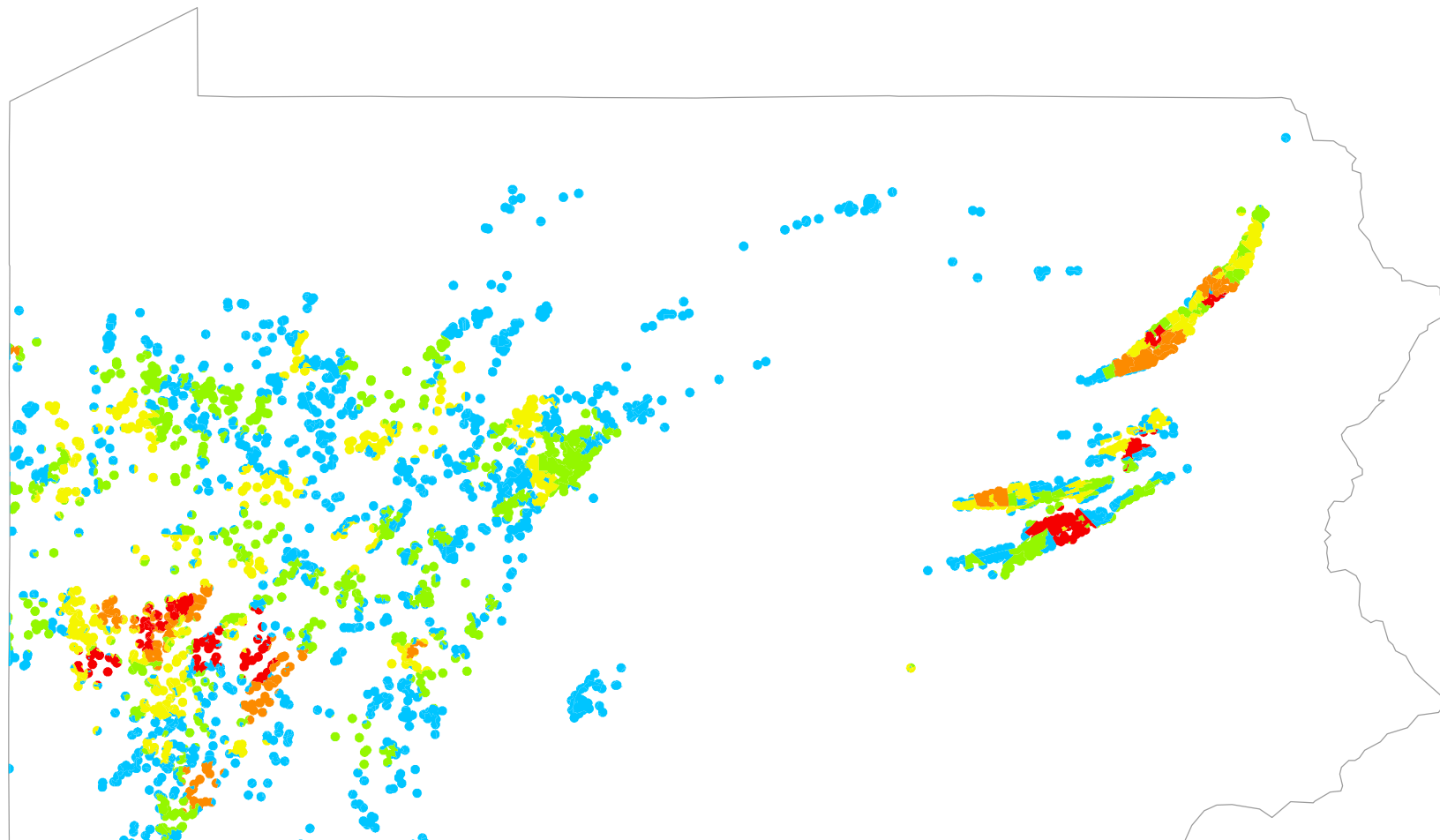


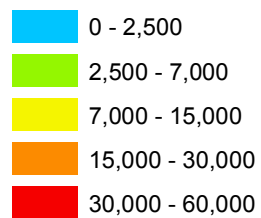
5.5 Million People Live within 1 Mile of an AML Site



Pennsylvania Populations within 1 Mile of an AML Site



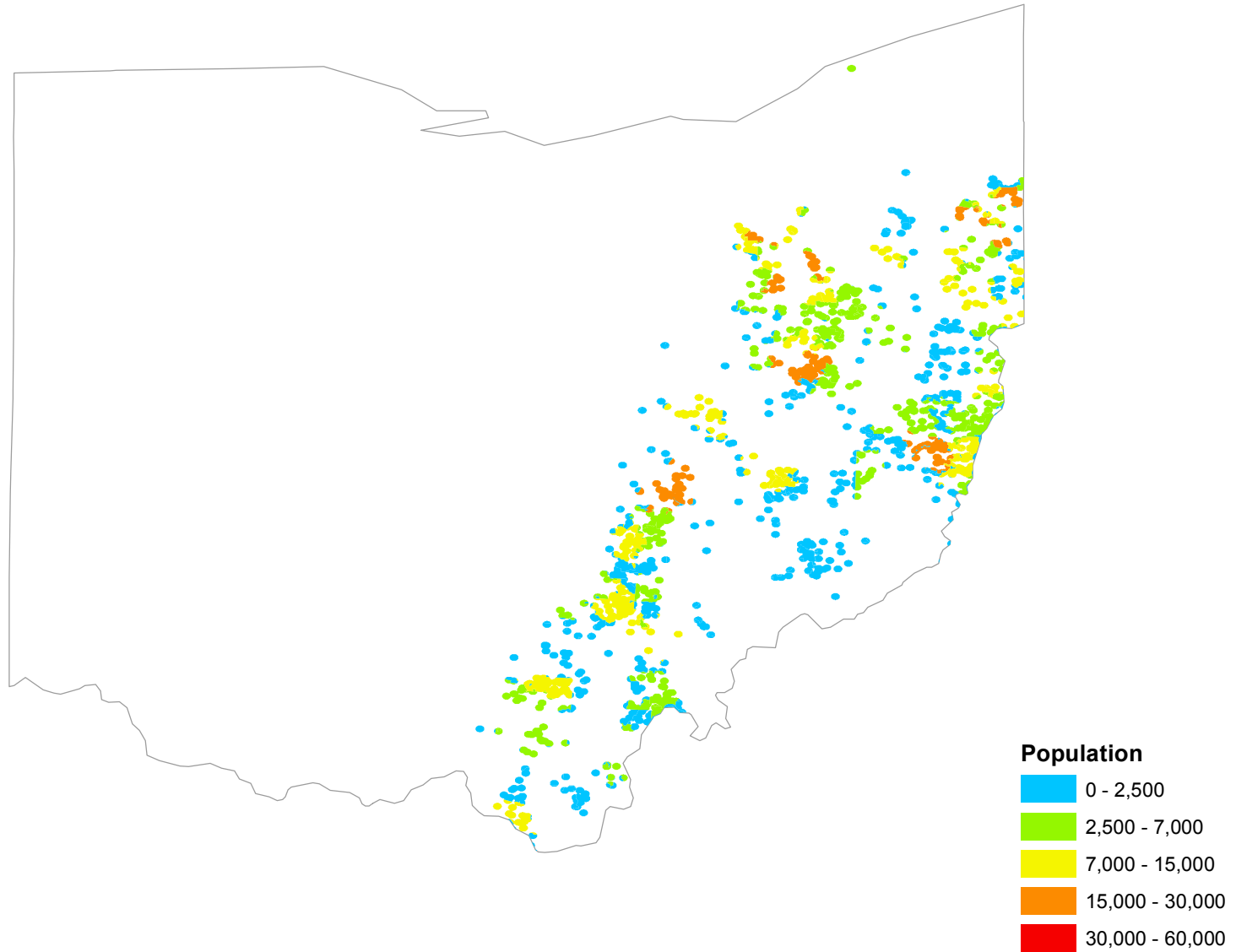
Population



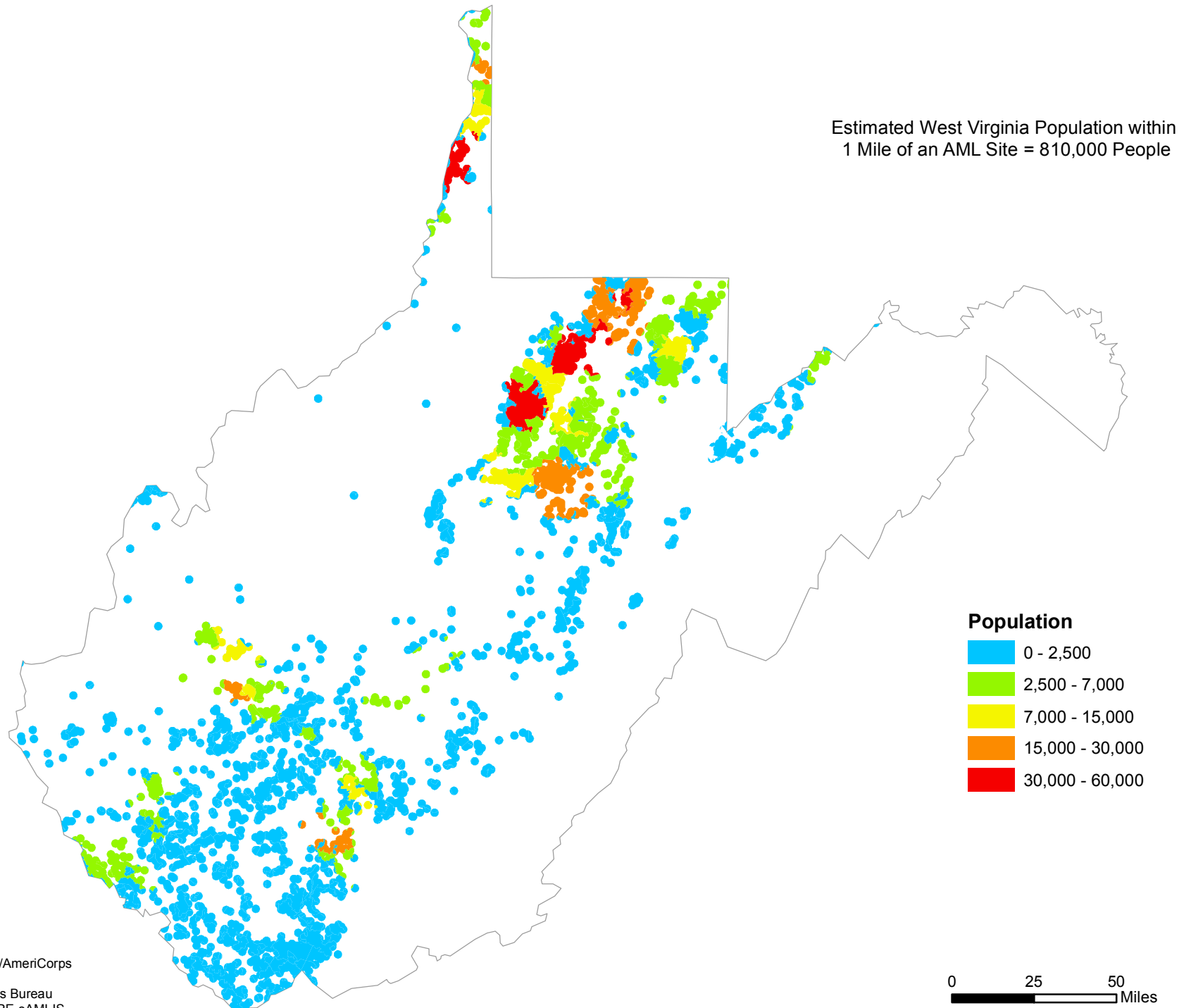
Estimated Pennsylvania Population within
1 Mile of an AML Site = 2.7 Million People



Ohio Populations within 1 Mile of an AML Site

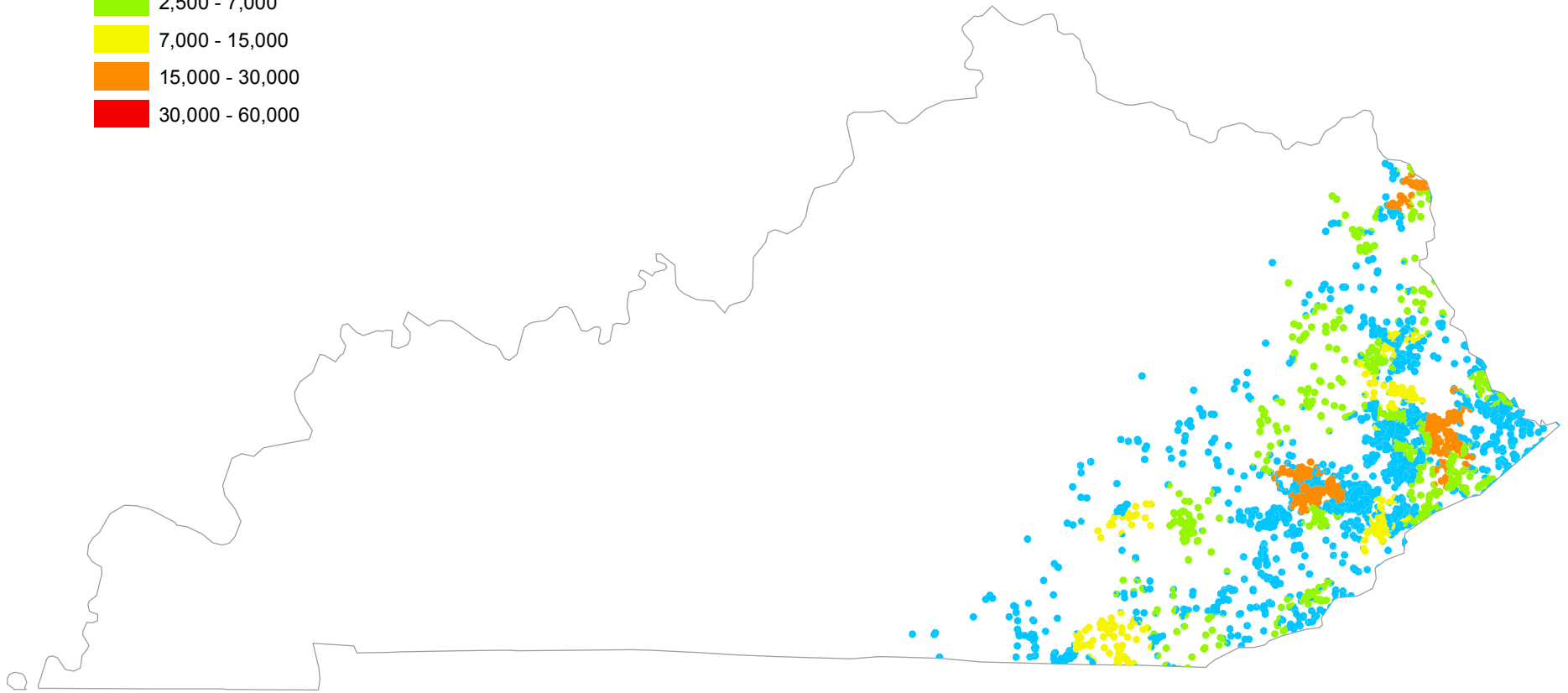
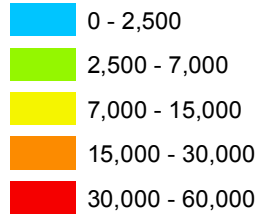


West Virginia Populations within 1 Mile of an AML Site



Kentucky Populations within 1 Mile of an AML Site

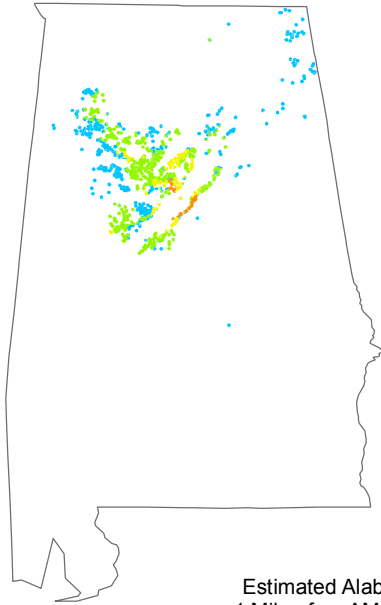
Population



Estimated Kentucky Population within
1 Mile of an AML Site = 408,000 People

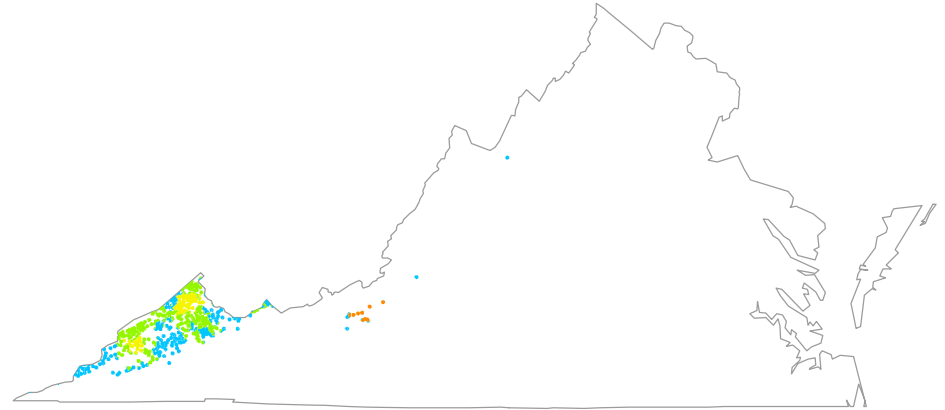
Populations within 1 Mile of an AML Site

Alabama



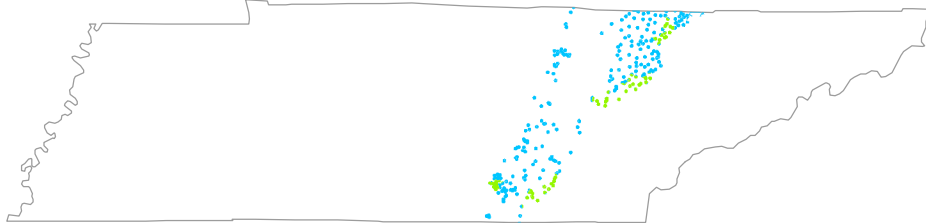
Estimated Alabama Population within
1 Mile of an AML Site = 387,000 People

Virginia



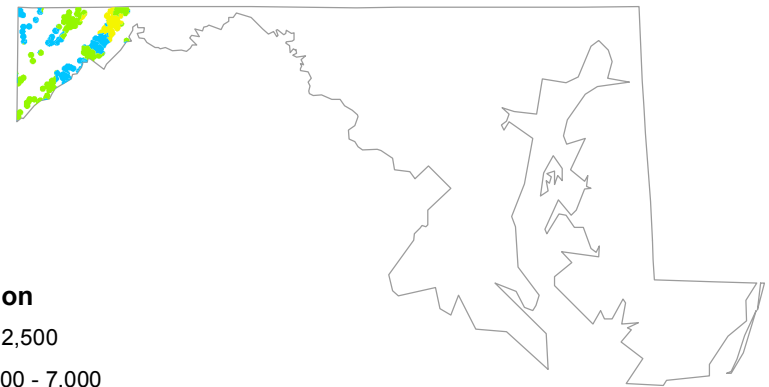
Estimated Virginia Population within
1 Mile of an AML Site = 117,000 People

Tennessee



Estimated Kentucky Population within
1 Mile of an AML Site = 75,000 People

Maryland



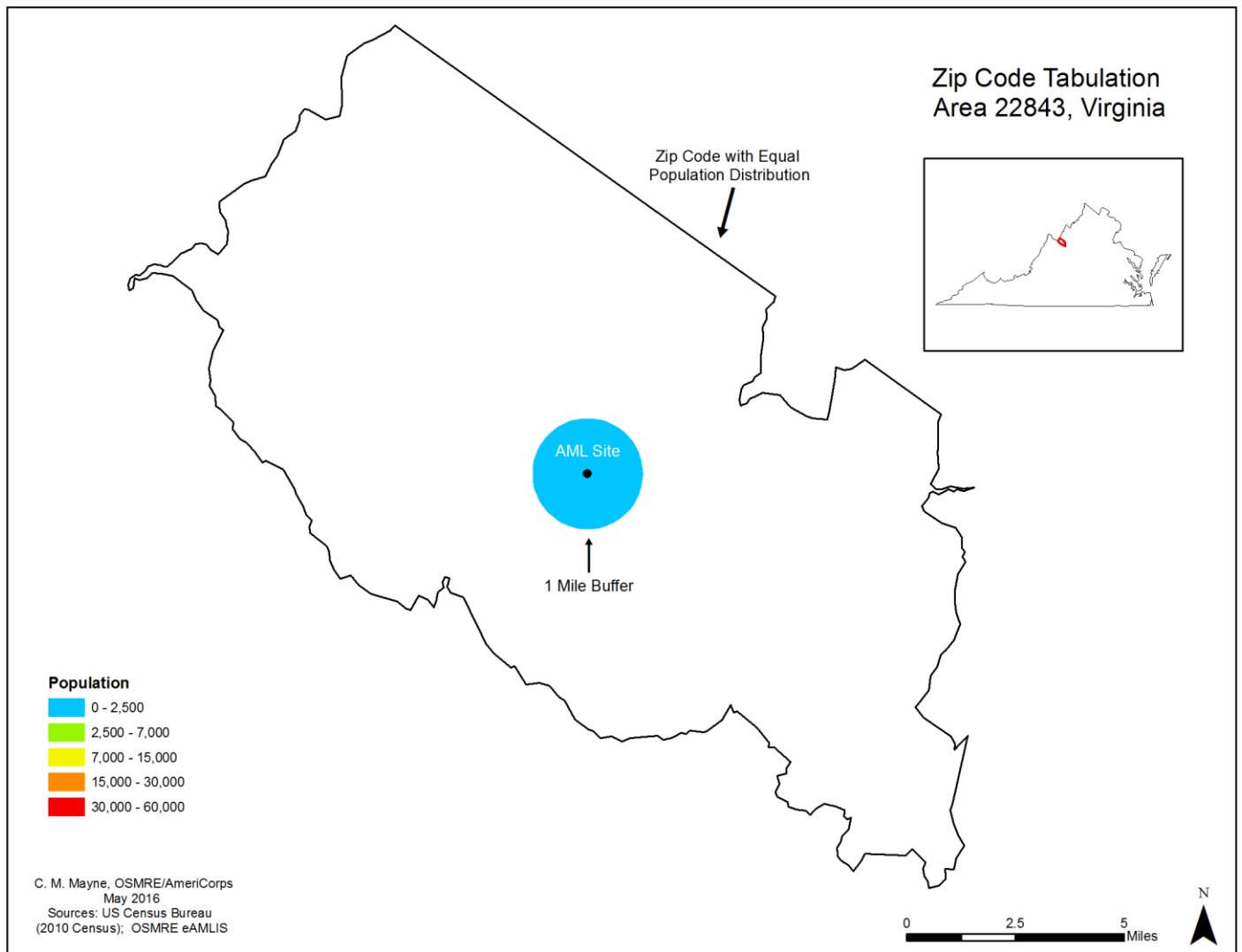
Estimated Maryland Population within
1 Mile of an AML Site = 43,000 People

Population



These maps represent the number of people that live within 1 mile of an Abandoned Mine Land (AML) site. They were created using data from the U.S. Census Bureau (2010 Census). Zip Code Tabulation Areas (ZCTA) data was acquired, which provided the area (sq. mile) of each zip code and the population. Then the population per square mile was calculated by dividing the population by the area of the zip codes. (A caveat: this calculation assumes an even distribution of the population throughout each zip code.) A ZCTA shapefile (2015) was also acquired which contained polygons for each zip code. The ZCTA shapefile and dataset were aligned to create a shapefile that had population, area, and population per square mile for each ZCTA polygon.

Next, an Abandoned Mine Lands (AML) shapefile was downloaded from the OSMRE eAMLIS database. This contained all of the AML sites (as points) in the US. Then a 1 mile buffer was created around each of the AML points. These buffers were then overlaid with the ZCTA information in order to find the estimated ZCTA population amounts that fell within the 1 mile AML buffers. See diagram below for an example.



The populations located within the buffers were summed for each state in the Appalachian Coal Region. These population totals were also compared with the total state populations in order to calculate the percentage of the population living within 1 mile of an AML site. This data can be seen below in Table 1.

Table 1. Populations within 1 mile of an AML site by state and percent of state population.

State	Pop within 1 Mile	% of 2010 Census Population
Pennsylvania	2,723,932	17.66%
Ohio	949,284	7.60%
West Virginia	809,850	30.41%
Kentucky	407,905	8.59%
Alabama	387,115	7.49%
Virginia	117,161	1.44%
Tennessee	75,037	1.17%
Maryland	43,384	0.75%
Total	5,513,668	9.06%