5.5 Million People Live within 1 Mile of an AML Site

Sources: US Census Bureau (2010 Census); OSMRE eAMLIS

Estimated Total = 5.5 Million People
Pennsylvania Populations within 1 Mile of an AML Site

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

Population
- 0 - 2,500
- 2,500 - 7,000
- 7,000 - 15,000
- 15,000 - 30,000
- 30,000 - 60,000

Sources: US Census Bureau (2010 Census); OSMRE eAMLIS

C. M. Mayne, OSMRE/AmeriCorps
May 2016
Ohio Populations within 1 Mile of an AML Site

C. M. Mayne, OSMRE/AmeriCorps
May 2016
Sources: US Census Bureau
(2010 Census), OSMRE eAMLIS

Estimated Ohio Population within 1 Mile of an AML Site = 949,000 People
West Virginia Populations within 1 Mile of an AML Site

Estimated West Virginia Population within 1 Mile of an AML Site = 810,000 People
Estimated Kentucky Population within 1 Mile of an AML Site = 408,000 People
Estimated Alabama Population within 1 Mile of an AML Site = 387,000 People

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

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

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

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