Boundary for Des Moines, Iowa and Vicinity

The Des Moines, Iowa area was chosen as an EnviroAtlas community because it offers several opportunities to leverage existing community engagement activities. The EnviroAtlas boundary for the Des Moines, Iowa area was determined using the 2010 Census definition of an Urban Area. In addition to Des Moines, it includes West Des Moines, Ankeny, and Urbandale, as well as additional towns within Polk, Dallas, and Warren counties. The area measures 880 square kilometers and encompasses 312 census block groups.

How was this boundary created?

EnviroAtlas community boundaries are derived from the 2010 U.S. Census Bureau’s Urbanized Areas (UAs). The UAs are created using census blocks that “comprise a densely settled core of...blocks that meet minimum population density requirements, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core.” UAs must have at least 50,000 people. Because the EnviroAtlas community component uses the census block group (each comprised of 4-10 census blocks) as a unit of analysis, community boundaries were created from the UAs rather than reflecting the UAs themselves.

Block groups were initially included if 50% of their population was within the UA boundary. From there, all holes were filled and all islands were excluded. If a block group only touched the main body of block groups at one corner, it was excluded.

The EnviroAtlas team then assessed each community boundary individually to ensure that it included all the area relevant to the principal community of focus and did not extend far beyond that community. Where available, the municipal boundaries were compared to the EnviroAtlas boundaries to ensure that the municipal core of the principal community was fully included. In Des Moines, Iowa the community boundary was derived by these rules and not altered beyond that point.

Where can I get more information?

For answers to frequently asked questions regarding the Census 2010 Urban Rural Classification, go to the Census website. EnviroAtlas also includes community summary fact sheets for each EnviroAtlas community that give an overview of the featured area and a description of some of the available community ecosystem services metrics—for example, the air and water filtration services provided by tree cover or the benefits of green space to residents’ health. Find the Des Moines, Iowa and vicinity 1-meter resolution community landcover map and data fact sheet in the interactive map table of contents under Supplemental Maps: Boundaries: Landcover and Biophysical Data: Raster: Community.

In-depth information on the relationships between urban ecosystems and human residents, such as green space and human health and well-being, can be found in EPA’s Eco-Health Relationship Browser. For additional information on data creation, access the metadata found in the drop-down menu for each map layer listed in the EnviroAtlas table of contents and click again on metadata at the bottom of the metadata summary page for more details. Click here to view the map service REST page pertinent to Urban Area attributes used in EnviroAtlas. To ask specific questions about this data layer, please contact the EnviroAtlas Team.

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