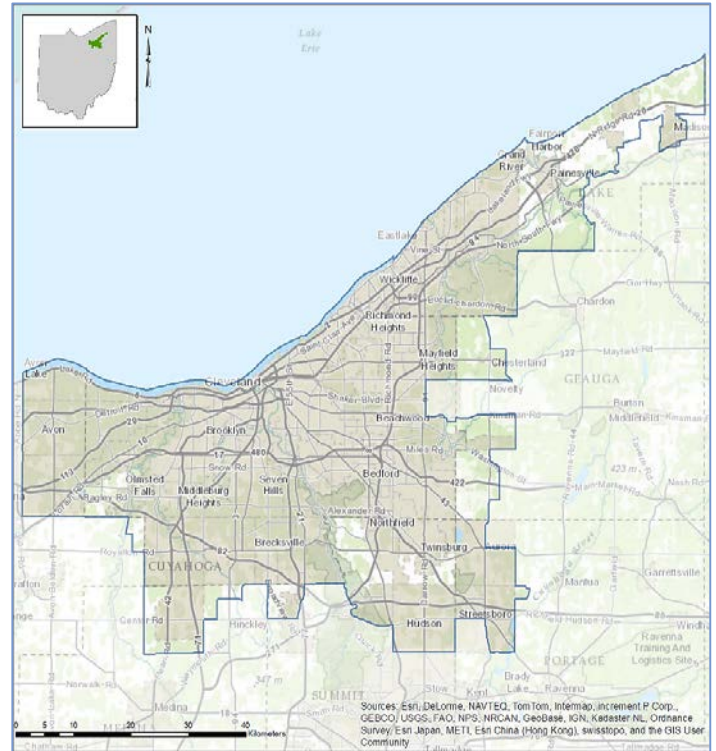# Cleveland, OH and surrounding area

Towns and cities rely on clean air, clean water, green space, and other natural amenities for economic sustainability and quality of life, yet their benefits are not always fully understood or considered in local decisions. EPA and its partners are producing EnviroAtlas to help communities better use environmental assets for public good.

EnviroAtlas includes an online interactive mapping application that anyone can use. The interactive map contains over 200 maps available for the U.S., as well as 100+ fine-scale maps for selected U.S. communities about existing and potential benefits from the local natural environment. The EnviroAtlas community component is based on 1-meter resolution land cover data. Information derived from these data is summarized by census block groups; more spatially explicit map layers are also provided. This fact sheet highlights some of the many community data layers available for the featured area of Cleveland, Ohio.
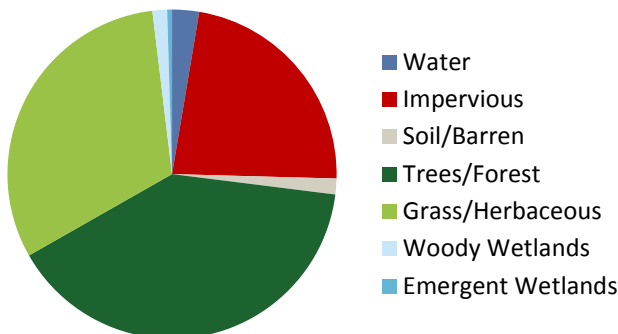
Background

The Cleveland, Ohio area was selected due to multiple opportunities to leverage existing research and community engagement activities including assessing poor urban heat-island rankings from a green infrastructure perspective. The EnviroAtlas boundary for the Cleveland area was determined using the 2010 Census definition of an Urban Area. The boundary includes many additional towns in the Cleveland area. The area measures 2,356 square kilometers, and encompasses 1442 census block groups.

The Cleveland, Ohio area is split between the Eastern Great Lakes Lowlands and the Erie Drift ecoregions. It has a

severe climate with warm summers and cold, snowy winters. Historically, the area was vegetated with mixed coniferous-deciduous forests; however, much of the natural vegetation has been removed for farming and urbanization. Cleveland hosts a wide variety of industries and corporate headquarters, especially in manufacturing, health care, and technology. The largest employers in the area are The Cleveland Clinic, University Hospitals of Cleveland, the US Office of Personnel Management, and Progressive Insurance. The demographics of the Cleveland community area indicate that the potential exists for income and other

Percent Land Cover in Community Area

- Water
- Impervious
- Soil/Barren
- Trees/Forest
- Grass/Herbaceous
- Woody Wetlands
- Emergent Wetlands

Cleveland Area Demographics 2010 Census	
Total population	1,758,114
Under 13 years old	15.94%
Over 70 years of age	11.11%
Other than white/non-Hispanic	30.73%
Below twice the U.S. poverty level	29.42%

disparities in the distribution of environmental assets. EnviroAtlas includes demographic maps that can help screen for potential health and well-being disparities resulting from disproportionate distribution of "green infrastructure."

Ecosystem Services Overview

In EnviroAtlas, the benefits humans receive from nature are grouped into seven categories that demonstrate the interconnectedness of these ecosystem services:

- Clean air
- Clean and plentiful water
- Natural hazard mitigation
- Climate stabilization
- Recreation, culture, and aesthetics
- Biodiversity conservation
- Food, fuel, and materials (data available only for communities with farm land)

Examples of some of the data included in EnviroAtlas are detailed below:
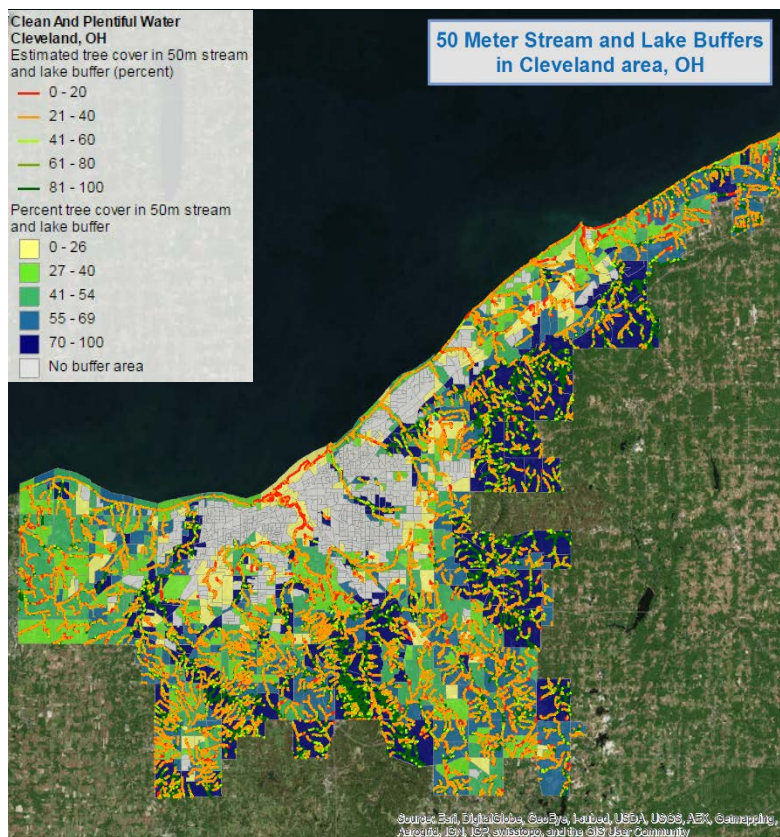
Access to Parks

Parks provide access to green space, encourage physical activity, and improve the livability and aesthetics of urban areas. Those who live closer to parks may be more likely to receive multiple benefits associated with this proximity.

- An estimated 14 percent of the Cleveland area is located within easy walking distance (500 meters) of a park entrance.
- An estimated 59 percent of the Cleveland population lives beyond easy walking distance (500 meters) of a park entrance.

Clean And Plentiful Water
Cleveland, OH
Estimated tree cover in 50m stream
and lake buffer (percent)
— 0 - 20
— 21 - 40
— 41 - 60
— 61 - 80
— 81 - 100
Percent tree cover in 50m stream
and lake buffer
0 - 26
27 - 40
41 - 54
55 - 69
70 - 100
No buffer area

50 Meter Stream and Lake Buffers in Cleveland area, OH

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Stream and Lake Buffers

Natural land cover adjacent to streams and rivers, sometimes called the riparian area or zone, helps protect water quality and supply for drinking, recreation, and aquatic habitat. The EnviroAtlas community component analyzes stream and lake buffers with widths of 15 and 50 meters.

- An estimated 12 percent of Cleveland's land area is within 50 meters of a stream or lake.
- 21 percent of Cleveland's 50-meter stream and lake buffers contain less than 20 percent tree cover (shorelines indicated by red lines in the figure above).

EnviroAtlas Tools and Features

- Learn more about and download EnviroAtlas data: https://www.epa.gov/enviroatlas/enviroatlas-data
- Search our data layers and access their fact sheets: https://www.epa.gov/enviroatlas/enviroatlas-dynamic-data-matrix
- Explore data for the Cleveland community area in our interactive mapping application: https://www.epa.gov/enviroatlas/enviroatlas-interactive-map
- Use our Eco-Health Relationship Browser to explore ecosystems, the services they provide, and their benefits to human health and well-being: https://www.epa.gov/enviroatlas/enviroatlas-eco-health-relationship-browser
- Contact us with questions about EnviroAtlas: https://www.epa.gov/enviroatlas/forms/contact-enviroatlas

EnviroAtlas combines maps, graphs, and other analysis tools, fact sheets, and downloadable data into an easy-to-use, web-based educational and decision-support tool. EnviroAtlas helps users understand the connections between the benefits we derive from ecosystem services and the natural resources that provide them. For more information, please visit www.epa.gov/enviroatlas.