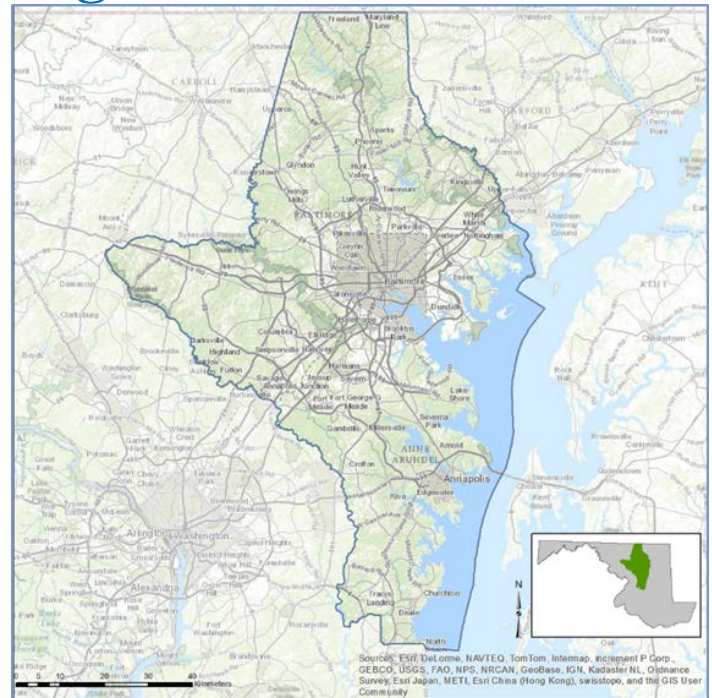# Baltimore, MD and surrounding area

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 300 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 Baltimore, Maryland.
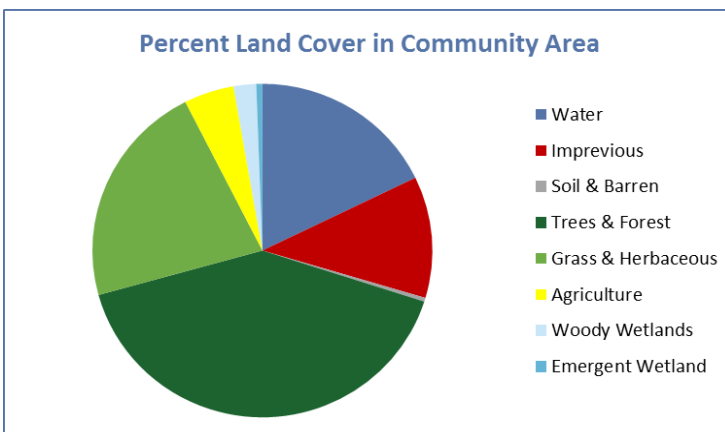
Background

In addition to the City of Baltimore, the EnviroAtlas boundary for the Baltimore area includes all of Anne Arundel, Baltimore, and Howard counties. This area measures 4,188 square kilometers, and encompasses 1,649 census block groups.

The Baltimore area is in the Southeastern Plain ecoregion. It has a humid subtropical climate with hot and humid summers and chilly winters with sporadic snowfall. The area was historically vegetated with pine, hickory, and oak

forests; however, much of the natural vegetation has been removed for urbanization. The leading industry sectors are educational services, healthcare, and government. The John Hopkins Hospital and University, the University of Maryland Medical System, and the State of Maryland are the largest employers. The demographics indicate that the potential exists for income and other 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 urban greenery.

Percent Land Cover in Community Area

- Water
- Imprevious
- Soil & Barren
- Trees & Forest
- Grass & Herbaceous
- Agriculture
- Woody Wetlands
- Emergent Wetland

Baltimore Area Demographics 2010 Census	
Total population	2,252.753
Under 13 years old	15.92%
Over 70 years of age	9.03%
Other than white/non-Hispanic	74.26%
Below twice the U.S. poverty level	27.43%

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:
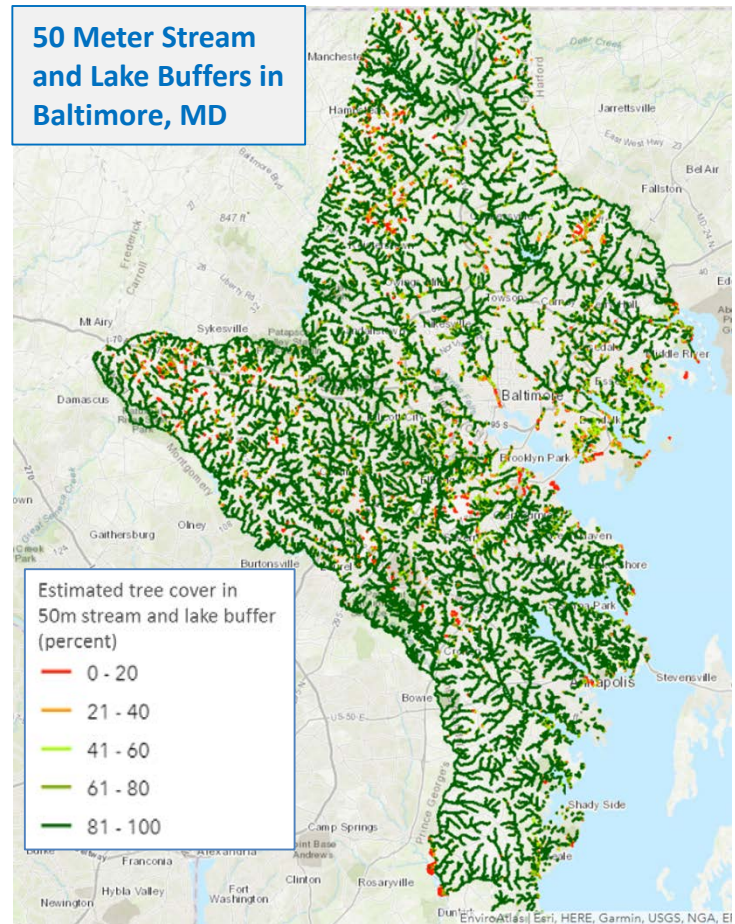
Green Space and Trees

Research indicates that physical and visual access to trees and other green space has positive physiological, cognitive, and emotional benefits. Lack of these resources in the places where we live, learn, work, and play can adversely impact human health and well-being. In the Baltimore community area:

- There are 2,365 square meters of green space per person.
- Almost 30,000 residents have less than 5 percent tree coverage within 50 meters of their home.
- There are 13,823,378 tons of carbon stored in the local tree biomass, with an additional 580,617 tons sequestered annually. Carbon in the atmosphere is an important factor related to climate stabilization.
- 8,382,590 kilograms of the common air pollutant ozone are removed from the air by local trees every year.

50 Meter Stream and Lake Buffers in Baltimore, MD

Estimated tree cover in 50m stream and lake buffer (percent)
- 0 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 100

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 quantifies riparian vegetation in both 15- and 50-meter buffers. These reflect water quality and habitat guidelines, respectively, although standards vary across geographies.

- An estimated 8 percent of the Baltimore community land area is within 50 meters of a stream, river, or lake.
- 13 percent of these 50-meter buffers contain less than 20 percent tree cover (red lines in the figure above).

EnviroAtlas Tools and Features

- Learn more about 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 Baltimore 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.

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