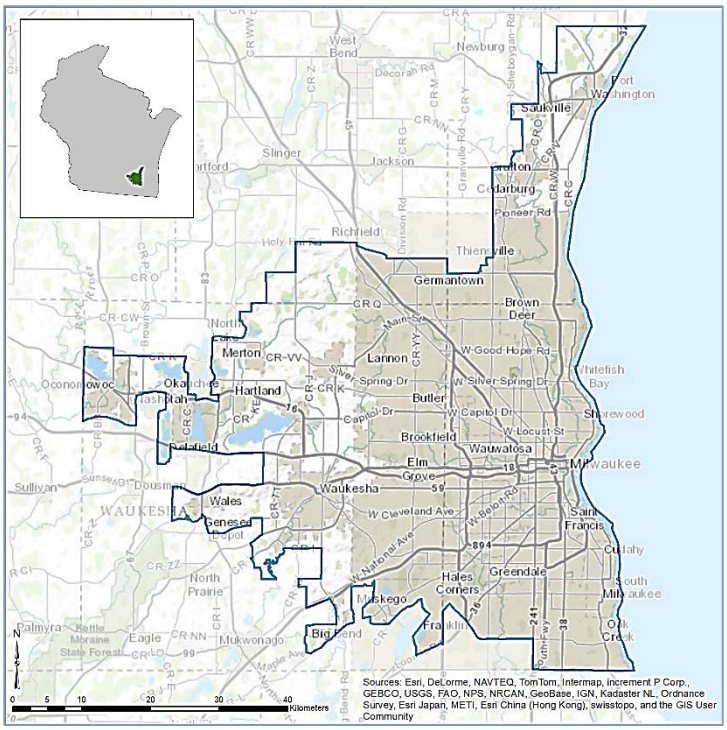
Milwaukee, WI and surrounding area

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 our website.

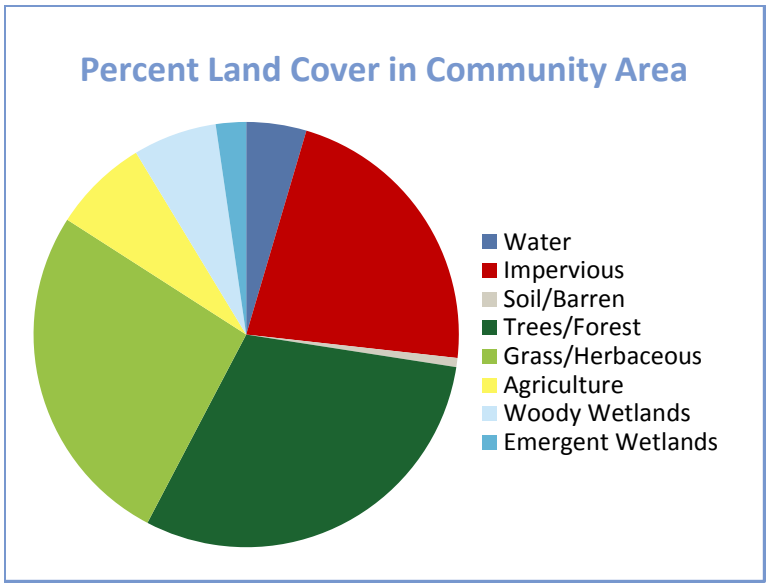
For selected U.S. communities, EnviroAtlas includes fine-scale maps and other information about existing and potential benefits from the local natural environment. This fact sheet highlights some of the many community data layers available.



Background

The Milwaukee, WI area was chosen as an EnviroAtlas pilot community in order to contribute to the Midwest Spatial Decision Support System. The EnviroAtlas boundary for the Milwaukee area was determined using the 2010 Census definition of an Urban Area. It includes the greater Milwaukee area, as well as portions of Waukesha, Washington, and Ozaukee counties. The area measures 1,799 square kilometers, and encompasses 1,175 census block groups.

The Milwaukee area is in the Southeastern Wisconsin Till Plain ecoregion. It has a severe, humid continental climate with warm summers and harsh winters. The vegetation transitions from hardwood forests and oak savannahs to tall grass prairies; some of the area has been converted to agricultural use. The community has a very diverse economy with service, managerial, and healthcare as the largest industries. The largest employers include Aurora Health Care, Wheaton Franciscan Healthcare and Kohl's Department Stores. The demographics of the Milwaukee community area 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 "green infrastructure."



Milwaukee Area Demographics	
Total population	1,373,711
Under 13 years old	17.61%
Over 70 years of age	9.09%
Other than white/non-Hispanic	34.45%
Below twice the poverty level	30.31%

CONTINUED ON BACK ▶

Ecosystem Services Overview

In EnviroAtlas, ecosystem services are organized into seven benefit categories:

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

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

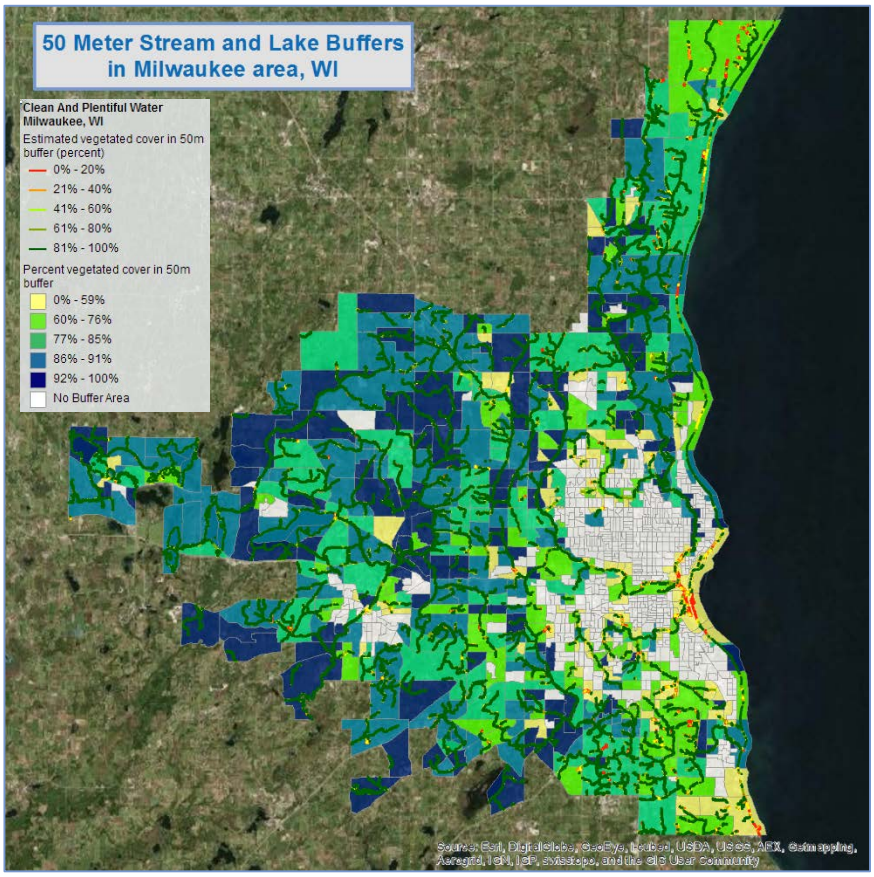
Green Space and Trees

Research indicates that physical and visual access to trees and other green space has positive physiological, cognitive, and emotional benefits. In the Interactive Map's table of contents, green space data layers can be found under all of the benefit categories.

- There are 1,097 square meters of green space per person.
- 101 out of 716 K-12 Schools have less than 25% green space within 100 meters.
- There are 5,064,353 tons of carbon stored in the local tree biomass with an additional 148,176 tons sequestered annually.
- 2,220 kilograms of ozone are removed from the air by local tree canopy every year.

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 8.3% of Milwaukee's land area is within 50 meters of a stream or lake.
- 83 percent of Milwaukee's 50 meter stream and lake buffers are vegetated (shorelines indicated by red to green lines in the figure above).

In the interactive map's table of contents, stream and lake buffer layers can be found in the Clean and Plentiful Water, Natural Hazard Mitigation, Recreation, Culture, and Aesthetics, and Biodiversity Conservation benefit categories.

EnviroAtlas Tools and Features

- EnviroAtlas Community Component: Data layers based on 1-meter land cover summarized to the block group scale.
- EnviroAtlas National Component: Data layers based on 30-meter land cover summarized to the watershed scale.
- EnviroAtlas Interactive Map: Go directly to the interactive map.
- EnviroAtlas Fact Sheets: Describe the project, each community, and each data layer in detail.
- Eco-Health Relationship Browser: An interactive relational tool that explores ecosystems, the services they provide, and benefits to human health and well-being.
- Contact the EnviroAtlas Team: Please contact us if you have any questions about 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 our website.