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# science in ACTION

INNOVATIVE RESEARCH FOR A SUSTAINABLE FUTURE

## **EnviroAtlas: An interactive web-based tool with a wealth of data to help inform planning & policy decisions that protect our environment & economy**

### **What is EnviroAtlas?**

EPA and partners have developed [EnviroAtlas](#) — an interactive web-based tool that states, communities, and citizens can use to help inform policy and planning decisions that impact the places where people live, learn, work and play.

EnviroAtlas combines maps, analysis tools, fact sheets, and downloadable data into an easy-to-use, web-based resource that allows users to understand the implications of various decisions and their potential impacts on ecosystems.

Communities are often faced with difficult decisions, such as trade-offs between the development of transportation, residential or commercial infrastructures and the maintenance of local water quality, wetlands, parks, and other urban green-spaces. EnviroAtlas helps communities better understand the potential benefits and drawbacks of their decisions by providing tools to analyze relationships between nature; health and well-being; and the economy. Health encompasses both physical and mental health while well-being refers to quality of life.

For instance, state and regional planners and advocacy groups considering routes for a proposed high-speed rail-line might use EnviroAtlas as a screening tool to see the potential effects and merits of each route. Conservation groups could note the presence of threatened and endangered species or intact habitats along proposed routes.



Local planners might use EnviroAtlas demographics to help cite a new rail station to maximize benefit to an economically-depressed sector of the community while also considering any impacts to close-by ecosystems. EnviroAtlas provides fine-scale data for select communities to help planners identify areas with low access to parks or to prioritize tree planting to benefit vulnerable or disadvantaged populations.

### **What data & analysis tools are in EnviroAtlas?**

The EnviroAtlas interactive map contains hundreds of data layers including census and land cover data; as well as information on stream and river locations, pollutant loads, impaired waters, threatened and endangered species, and wetland, climate and soil characteristics. EnviroAtlas presents data at two primary scales: national and community. Analysis tools embedded in the Interactive Map help users interpret the data.

The national component of EnviroAtlas summarizes data for the 48 mainland U.S. states by [12-digit hydrologic unit codes \(HUCs\)](#) of which there are about 90,000 in the United States. Each HUC covers approximately 40 square miles.

The [community component of EnviroAtlas](#) includes fine-scale data for five pilot communities: Durham, N.C.; Portland, Maine; Tampa, Fla.; Pittsburgh, Pa.; and Phoenix, Ariz. Data layers for a sixth pilot community — Milwaukee, Wis. — are being finalized. Most community data layers are summarized by census block group, providing data at a fine resolution that can be compared across select communities.

Communities included in EnviroAtlas were selected based on environmental and human health data availability, population size, geography, regional interest, and potential need for detailed spatial data analysis. By 2017, EnviroAtlas will feature fine-scale data for more than 50 U.S. communities.

EnviroAtlas also features an [Eco-Health Relationship Browser](#) that allows users to explore literature on the linkages between ecosystems, the services they provide, and their impact on human health and well-being.

## Protecting ecosystems & our economy

Healthy ecosystems are intertwined with our health and well-being, our economy and our security. Ecosystems provide us with many benefits like clean air and water, opportunities for recreation, and protection from severe weather like hurricanes and floods. They also provide habitat for plants, fish and wildlife, and materials we need to produce our food, clothing, shelter, and pharmaceuticals.

These and other benefits from nature are referred to as “ecosystem services.” The services provided by ecosystems are multifaceted, intertwined and often difficult to quantify.

The decisions we make individually and collectively can affect ecosystems and their ability to provide the goods and services that promote well-being and a healthy economy.

Using EnviroAtlas, people from a wide variety of disciplines and interests can access, view and analyze diverse information to better understand how to conserve, restore and sustain ecosystems.

## EnviroAtlas partners & availability

EnviroAtlas was developed collaboratively by EPA in partnership with the [U.S. Geological Survey \(USGS\)](#), [Landscape America](#), the U.S. Department of Agriculture’s [Forest Service](#) and [Natural Resources Conservation Service \(NRCS\)](#), and other federal and non-profit organizations, universities, and communities, including state, county and city-level stakeholders.

[EnviroAtlas](#) is available to anybody with a computer and an internet connection. No special software is needed. It is currently not optimized for smartphones or tablets, but a mobile-friendly version is planned for the future.

[EnviroAtlas](#) —connecting people, human health, ecosystems and the economy. Making informed decisions will ensure people can continue to enjoy the economic, social and environmental benefits of ecosystems for years to come.

**Find EnviroAtlas online at:**

<http://enviroatlas.epa.gov/enviroatlas>

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