NCLA STEM-LINC Presents:

EnviroAtlas

A powerful tool for environmental justice and planning

Hello!

I am Jo Klein

GIS & Data Visualization Librarian

Today's Objectives

1. Overview of EnviroAtlas
2. Using the interactive map
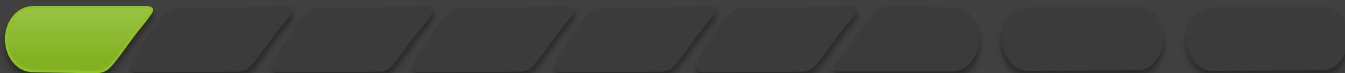3. Example lesson plan in action

Overview of EnviroAtlas

" EnviroAtlas is 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. "

epa.gov/enviroatlas

Overview

EnviroAtlas provides data and information about ecosystem services, ecosystem stressors, and human health and well-being.

Ecosystem Services Categories:

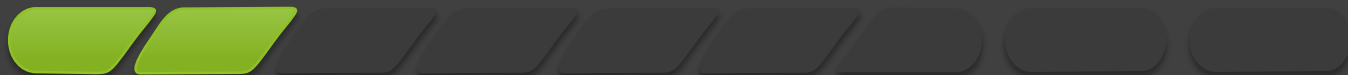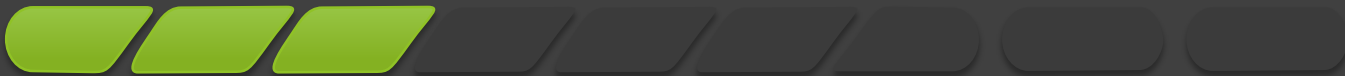| BIODIVERSITY CONSERVATION | CLEAN AIR | CLEAN & PLENTIFUL WATER | CLIMATE STABILIZATION | FOOD, FUEL & MATERIALS | NATURAL HAZARD MITIGATION | RECREATION, CULTURE & AESTHETICS |

Overview

Interactive web apps

Data & factsheets

Training & education resources

Overview

Interactive Web Apps

EnviroAtlas Interactive Map
Easy-to-use, GIS-lite application for viewing ecosystem and health data and exploring spatial relationships

Eco-Health Relationship Browser
Visualization tool for exploring relationships between health, ecosystem, and ecosystem services

Overview

Data and Factsheets

Dynamic Data Matrix
Interactive data explorer where users can search the 487 downloadable geospatial data layers and filter by benefit category, topic, and spatial extent, plus download metadata and factsheets

Factsheets
Comprehensive summaries of topics complete with background information and bibliographies, available for (almost) all available data layers

Overview

Training & Education Resources

Training & Tutorial Videos
Interactive tutorial Story Map that provides step-by-step video and text guidance on how to use tools and features of the interactive map, plus accompanying demo videos hosted on YouTube

Example Projects & Lesson Plans
Examples of uses for EnviroAtlas tools and data from the EnviroAtlas team and user community, and lesson plans for K-12 and undergraduate education

Overview

Let's take a look!

epa.gov/enviroatlas

Using the Interactive Map

① epa.gov/enviroatlas 🔗

② **Launch the Map**

Map Tools & Features:

Change analysis tool (ECAT)	Compare My Area	Hydrologic Unit (HUC) Navigation	Raindrop	Elevation Profile	Save Your Session

Using the Interactive Map

Data Layers

ENVIROATLAS DATA

DEMOGRAPHIC LAYERS

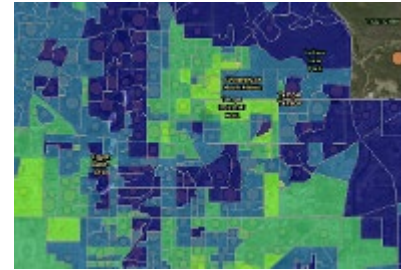TIME SERIES LAYERS

EXTERNAL AND CUSTOM DATA

FEATURED COLLECTIONS

Using the Interactive Map

Example Lesson Plan in Action

Building a Greenway: A Case Study

Case Study Synopsis 🔗

▶ In this hypothetical case study, funding to complete a pilot section of a greenway has been granted to a city Parks and Recreation Department. The proposed pilot section is being presented to the city council for review and approval…**As a concerned citizen, you are asked to review the case and weigh in on the selection of a pilot section for the greenway at an upcoming public hearing**

▶ The Parks and Recreation Department goals include the following:

▶ Improve access to and use of parks and green spaces,

▶ Enhance habitat for biota,

▶ Encourage physical activity and recreational opportunities, particularly for aging populations.

Example Lesson Plan

Building a Greenway Worksheet: Understanding Maps 🔗

- "Figure 2 shows the percent of the Canton population that is over 70 years old, on top of a map showing percent green space in Canton.

  - The demographic data, in this case the elderly population, are represented by orange circles

  - The size of the circle indicates the relative number of elderly individuals in a given census block group.

  - Block groups that have the most green space are dark blue, while those with the least are yellow."

- **"Do you see any trends related to the elderly population and green space? Explain."**

Example Lesson Plan

Lesson Plan Flexibility

▶ Options for:

  ▶ Various audiences (largely K-12 and undergraduate)

  ▶ Time allotted

  ▶ Internet access

  ▶ Formal and informal educational settings

    ▶ Next Generation and State Science Standards

▶ "Stakeholder Slips" handout & discussion from various stakeholder perspectives 🔗

Example Lesson Plan

- Abiotic and Biotic Connections in NC with EnviroAtlas 🔗

- *Using EnviroAtlas to Identify Underserved Communities* (UNC Capstone Course) 🔗

- EnviroAtlas FactSheet 🔗

More Resources

Questions?

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