US ERA ARCHIVE DOCUMENT



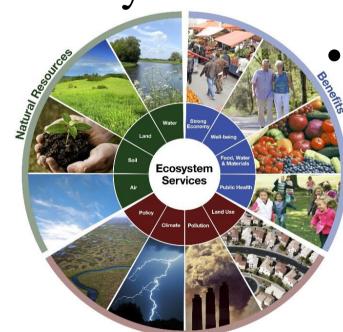
Actionable Science for Communities EnviroAtlas – SHC 1.62

Anne Neale, Project Lead, National Exposure Research Laboratory Laura Jackson, Deputy Project Lead, National Health and Environmental Effects Lab Megan Mehaffey, Deputy Project Lead, National Exposure Research Lab



Problem Summary & Decision Context

- Communities are under pressure from a range of issues and are impacted by decisions and policies made within and external to their boundaries.
- Decision-makers at every level of governance need access to consistent environmental, social, and economic data to inform efficient, effective, and equitable decision-making.
- The use of advanced information technology, GIS, landscape-scale science, remotely sensed data, and eco-health science allow for incorporation of quantitative and qualitative spatial information into every day decision-making.



Ecosystem services have emerged as a viable framework for decision-making and as an approach for economic valuation.

Utility to Agency?

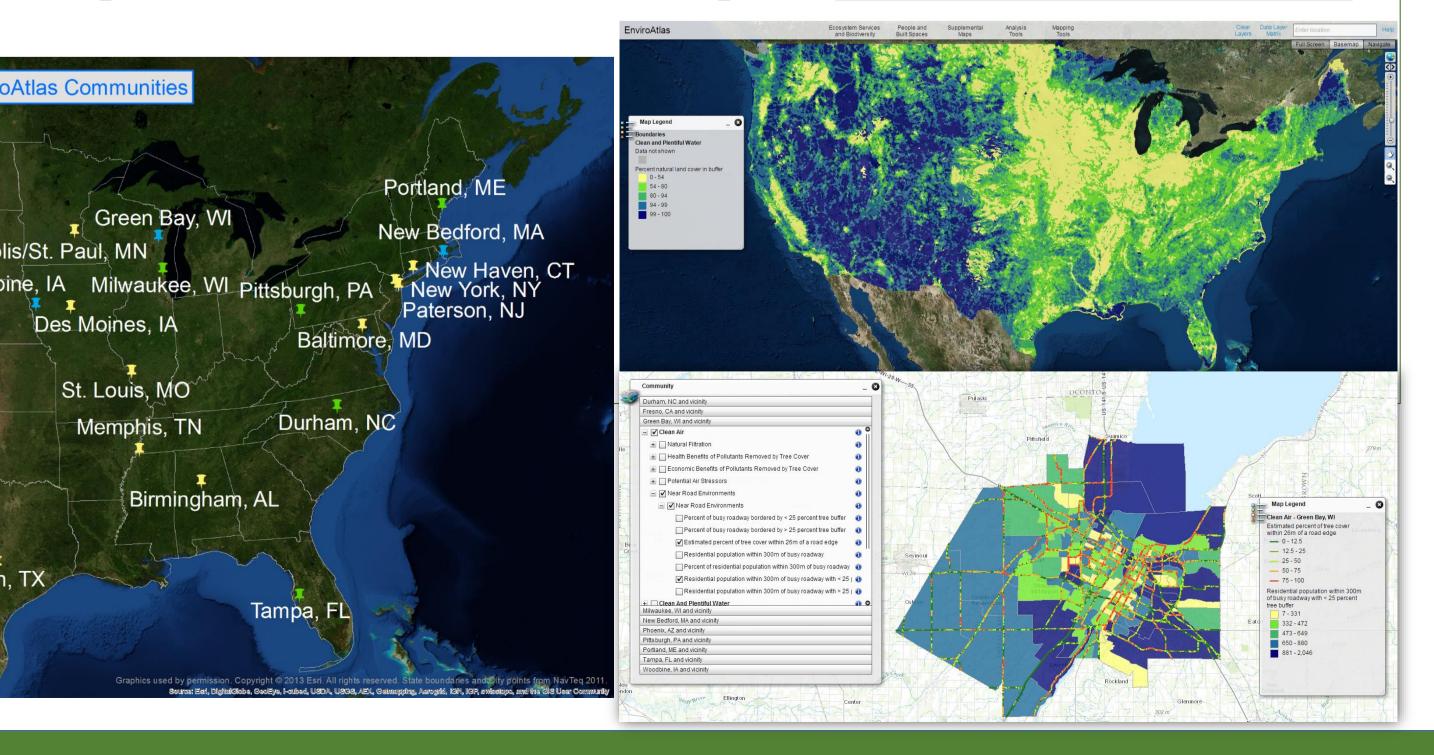
- Helps Regions help communities with decision-making; relevant to many decision types
- Provision of data and tools to multiple Program Offices; can serve many uses, including environmental justice
- Provides data for additional research and for education
- Can be leveraged with other Agency tools, e.g., NEPAssist, EJSCREEN, GeoPlatform, etc

Accomplishments

- EnviroAtlas publicly released in May 2014
 - -25,000 web sessions; 33% return visitors; 152,000 map views (between May 1 Dec 31)
- Serving as ecosystem services hub of EcoINFORMA (ecosystems.data.gov) a White House initiative designed to mobilize and integrate federal environmental data; also featured in Climate.data.gov and Toolkit.climate.gov
- Implemented improved functionality based on user feedback from multiple groups
 - 650 beta testers, POs and ROs, peer reviewers, other users
- EnviroAtlas includes over 160 data layers for the conterminous nation and roughly 100 data layers for each of the selected communities
- Published data for 4 additional communities
- Published two use cases

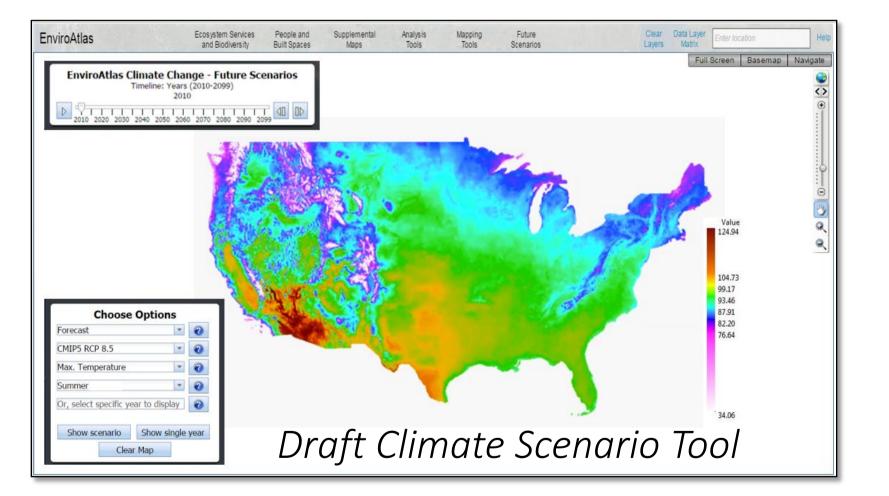
2013 Communities

- Conducted widespread outreach activities including non-traditional audiences for ORD
- EnviroAtlas data and tools are being used
 - Durham community used EnviroAtlas to prioritize tree planting efforts around elementary schools
 - Eco-Health Relationship Browser used in Health Impact
 Assessment training in health departments and classrooms
 - OW using EnviroAtlas data for TMDL recovery potential and prioritization
 - Region 4 using EnviroAtlas data in Watershed Integrity Index
 - South Atlantic Landscape Conservation Cooperative used
 EnviroAtlas data to help inform their conservation blueprint



Future Directions

- Research and development leading to improved functionality including crosswalks with FEGS and other ES classification systems and development of case studies or use cases using EnviroAtlas
- Development of new tools and data including a climate and ES scenarios tool, additional communities, updated Eco-Health Relationship Browser, index building tool, updated data based on NLCD 2011, and new metrics related to environment and socioeconomic aspects
- Investigate relationships between eco health and human health and other well-being outcomes
- Communications and outreach including development of classroom curriculum, training materials, and web content; stakeholder outreach and feedback loop including live demonstrations; development of collaborative efforts within and external to EPA



Partner Engagement Opportunities

- Live demonstrations for PO's and Regions
- Continued OW/ORD Collaboration
- OAQPS/ORD BenMAP / EnviroAtlas coordination and collaboration
- Program Office/Regions/ORD jointly develop use cases
- Program Office / Regional continuous feedback to ensure EnviroAtlas is meeting needs