Product/Output Title: Enviroatlas: 2 use cases

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ORD Task (as listed in RMS): SHC 1.2.3.1, 1.2.3.2, 1.2.3.4, 1.2.3.6, 1.2.3.8 and 1.2.3.9

Suggested ORD Partner Contact/Intended audience for product: Multiple Program Offices including

Sustainable Communities, Environmental Justice, and EPA Regions.

Brief Description:

Background

EnviroAtlas is an online spatial decision support tool for viewing and analyzing the supply, demand, and drivers of change related to natural and built infrastructure at multiple scales for the nation. To maximize usefulness to a broad range of users, EnviroAtlas contains training materials including help documents and tutorial videos; we are also developing use cases. Use cases demonstrate to users how to use EnviroAtlas resources for on-the- ground decision-making. Eventually EnviroAtlas will include a large library of use cases using different types of communications media. This deliverable consists of the first two use cases. The concept behind use cases is to develop them using easy-to-understand text and present them using different types of interactive media. Use cases are developed for a particular geography but the methodology can be transferred anywhere.

Approach Taken

For the first two use cases published in EnviroAtlas, we used ESRI Story Maps to develop use cases consisting of interactive maps and descriptive text. These first two use cases illustrate how to use EnviroAtlas community data in two decision contexts. The first use case illustrates how a planner might use EnviroAtlas to prioritize the planting of additional trees to benefit children in the vicinity of Durham, NC. The second use case illustrates how to identify the amounts of near-road tree cover in relation to residential populations that are vulnerable to air pollution. Communities examined included Durham, NC, Milwaukee, WI, Portland, ME, and Tampa, FL.

Results

Users have responded well to use cases and have reported back that they are useful and illustrative of how to use EnviroAtlas resources. The interactive nature of Story Maps, an emerging technology, makes them an appealing way to demonstrate how to use EnviroAtlas.

Significance

Communities, EPA Program and Regional Offices, and other vested entities typically lack sufficient local environmental information to assess the full ramifications of many individual and cumulative decisions. Myriad activities of multiple organizations directly and indirectly affect public health, community resilience, social equity, and other key components of sustainability. Decision-support tools and information are needed to facilitate a more full accounting of the costs, benefits, and trade-offs involved in alternative actions. Use cases are one way of training users how to use EnviroAtlas in a decision-specific context. Well-developed training materials are critical to the success of EnviroAtlas especially in regards to appealing to a much wider audience than typical GIS users.

Expected Use by Partners or Others

EnviroAtlas data and information are already in use by Program Offices such as OW and OECA, local governments and academia. The publication of use cases within EnviroAtlas will broaden the audience and increase understanding of how to use EnviroAtlas resources.

URL: http://enviroatlas.epa.gov