

Ecosystem Services in New York City

Sponsored by the Urban Field Station of the NYC Parks Department and the Wildlife Conservation Society

Background

How accurate are models of urban ecosystem services and how best to communicate these services to the general public, decision-makers, and land managers?

Urban landscapes provide more than housing and economic opportunity; they also provide ecosystem services—or nature’s benefits—on which people depend. The form of the urban landscape, the lifestyles of the people that live there, and the climate all interact to influence ecosystem services provided by the water cycle, carbon cycle, biodiversity and habitat, recreation and social cohesion, among others.

Working with numerous partners in New York City, including the New York City Urban Field Station, the Wildlife Conservation Society has developed a free, web-based forum to create, test, and share visions of future environment of New York City neighborhoods. Each vision is evaluated in terms of some 70 environmental performance metrics that are directly connected to environmental goals for the city, including greenhouse gas emissions, storm water runoff, habitat diversity, and housing. The models used to estimate these metrics are derived from New York City’s Environmental Quality Review (CEQR) standards, promulgated by the Department of City Planning, and methods derived from the scientific literature.

Job Description

Currently released in beta form at <http://visionmaker.nyc>, one of the pressing needs for the Visionmaker platform is to better validate the estimated metrics against independent models and data sets in New York City. Validation will enable us to understand the uncertainty of the estimates, so that users can assess how to use the information provided. We also hope that by going through a series of validation exercises, we can also improve the models in Visionmaker 2.0.

The Urban Field Station is producing “talking points” on ecosystem services that will communicate clearly how the benefits of nature directly impact communities and increase health and quality of life. A first draft of talking points will be created by early summer, but we want to expand the talking points into graphic or visual images that further communicate the value of nature. We also want to develop a communications strategy around ecosystem services.

The two responsibilities will be intertwined.

Qualifications: The ideal candidate would combine technical skills with computer models and geographic information systems (GIS) as well as graphic and communications skills with a passion for urban ecosystems.