## HARRY R. HUGHES CENTER FOR AGRO-ECOLOGY Maryland Ecological Investment Corporation

Maryland





Forests are commonly valued economically for their ability to supply products, such as lumber, pulp and paper. The ecosystem services provided by forests (e.g., generating and maintaining soils, providing wildlife habitat, abating air pollution, improving water quality, etc.), however, have largely been considered free services by traditional economic evaluation systems. By employing alternative methods of natural resources valuation, the once-undervalued ecosystem services provided by Maryland's forests can become economic drivers that help fund their own protection and enhancement.

With funding from the Harry R. Hughes Center for Agro-Ecology, Biohabitats is assisting the University of Maryland's Department of Environmental Science and Technology in developing a simulation model whereby economic values are assigned to Maryland's forests and forest stewards are paid for providing ecosystem services to public consumers. Development of the model involves the valuation of all Maryland forest types, including restored riparian and upland forests. Biohabitats is providing the team with recently restored forest sites and serving as technical advisors for model calibration and review, as well as the collection and analysis of ecological data such as leaf area index, basal area, tree species, soil total organic matter, etc.

The value of forest ecosystems will be determined using the integrative accounting model of solar emergy evaluation. A contraction of the term "embodied energy," emergy refers to the total amount of work required to make something, which includes the work of nature and people. Once established, the model entity, known as the Maryland Ecological Investment Corporation could potentially be used in states beyond Maryland and with all types of ecosystems.

## SERVICES

Inventory & Assessments Planning Parks Design Management Public Outreach Policy

**conservation planning** ecological restoration regenerative design



Physiographic Province Coastal Plain, Piedmont, Appalachian Plateau, Ridge & Valley, Blue Ridge

Bioregion Chesapeake/Delaware Bays

> Watershed Chesapeake Bay

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