



Integrating Ecosystem Service Value as a Factor in Policy and Decision-making: *Challenges in New Jersey*

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*Jeanne Herb; Associate Director
Environmental Analysis and Communications Group
Edward J. Bloustein School of Planning and Public Policy*



Valuing New Jersey's Natural Capital:

An Assessment of the Economic Value of the State's Natural Resources

April 2007



State of New Jersey
New Jersey Department of Environmental Protection
Jon S. Corzine, Governor
Lisa P. Jackson, Commissioner

“Natural resources provide valuable services to millions of New Jersey residents. Quantifying the value of New Jersey’s natural resources services will provide a basis for making better policy choices and demonstrate the links between healthy ecosystems and a strong economy.”

Services	Goods
<p>Wetlands</p> <ul style="list-style-type: none"> Water filtration Water supply Flood and surge control <p>Marine systems</p> <ul style="list-style-type: none"> Nutrient cycling <p>Forest cover and urban green space</p> <ul style="list-style-type: none"> Water supply Pollination Aesthetic and recreational amenities Carbon sequestration Air filtration Heat island effect 	<p>Water – drinking, lawns, showers, etc.</p> <p>Minerals – sand, crushed stone, gravel</p> <p>Farm Products – Direct NJ economic value in 2004: \$480 m- \$1 billion! Wow!</p> <p>Non-farm animals – game species</p> <p>Non-farm plants – nurseries, medicinal</p> <p>Wood – fuel wood, other wood products</p> <p>Fish - commercial fish (2004 – direct value \$750 million), recreational fish (2004 – direct value \$200 million). Wow!</p>

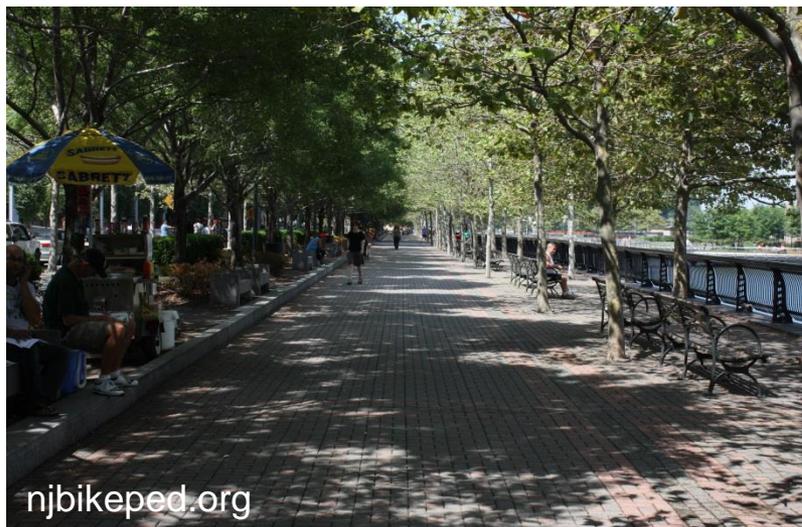
Ecotourism

- Includes wildlife watchers, recreational hunters, anglers
- 2001 USFWS value for NJ \$2.2 billion
- Meals, lodging, transportation, etc.
- \$3.1 billion annual value, including support for 37,000 jobs



Estimated Value

Ecosystem Services	\$8.6 billion/year	Wetlands Marine systems Forest Cover
Ecosystem Goods	\$2.8 billion/year	Farmland Marine Waters Quarries
Wildlife related tourism	\$3 billion/year	



Policy Opportunities

- **Priority setting** – where to apply limited resources
 - Land and open space acquisition
 - Project approval priorities
 - Planning criteria
 - Infrastructure (e.g. air, water) funding Criteria
- **Stewardship planning** -
- **Budgeting** – stewardship of systems that provide value
- **Pollution Control** – allowable strategy and potentially more cost effective
- **Risk Management** – Climate adaptation
- **Municipal Zoning** – master planning
- **Natural Resource Damage Assessment** – include ecosystem service value in damage accounting
- **Tax policy**
- **Eminent Domain**

Framing Today's Policy Discussion



“Once the services of the state’s ecosystems have been translated into economic terms, it will be less difficult for decision-makers to weigh those values against the potential values of growth and development and what it might cost to replace those services. In short, they will be able to see in rather stark terms what is at stake when natural areas – forests, fields, wetlands – are lost to sprawl.”

Today's Policy Question

How do we apply methods that determine the value of ecosystem goods and services and integrate them as a fundamental element of how we make decisions?

