

NCSE WILDLIFE HABITAT POLICY RESEARCH PROGRAM
Project Overview
Research Project 1F

Estimation of U.S. Habitat Conservation Costs

Principal Investigator
Frank Casey
Defenders of Wildlife

Two important tools that are needed to develop financial resources to protect U.S. wildlife habitat are reliable estimates of the amount of habitat that needs to be protected and the cost of providing that protection.

Key Issue

In addition to overall cost estimates, conservationists, policy makers and funding authorities who are working to increase funding for expanding the national habitat conservation system require information about variations in these costs among potential habitat protection strategies.

Project Objective

The primary objective was to provide national cost estimates for three alternative approaches to protecting priority habitat areas identified in the federally mandated state wildlife action plans.

Approach

The project team employed a five-stage approach:

1. estimate national land requirements for additional habitat protection, based on a representative sample of state plans that mapped unprotected focal conservation opportunity areas
2. provide national cost estimates for three alternative land protection tools (fee-simple purchase lease, and easements), including easement transaction costs and management costs associated with land ownership
3. identify potential impacts of large-scale acquisitions on local land prices
4. develop outreach materials (including a prototype cost estimator) that project managers, conservation practitioners and policy makers can use for future local habitat conservation cost projections
5. conduct a policy analysis of the magnitude of expenditures required and the trade-offs among potential financial instruments.

Key Findings

The project results show that over 30 years the undiscounted least-cost option for protecting 12% of the continental United States is through land rentals/leases, at an estimated \$219 billion. Fee-simple purchases with management costs would be nearly \$927 billion. Easements, including

initial one-time transaction costs, would amount to about \$350 billion. However, if current land-owners were paid to manage these same lands for biodiversity values, the cumulative undiscounted costs after 30 years would be about \$135 billion.

Deliverables

A final completion report will be posted on the [WHPRP web site](http://ncseonline.org/WHPRP/) <<http://ncseonline.org/WHPRP/>> and the [Defenders of Wildlife Conservation Economics](http://www.defenders.org/programs_and_policy/science_and_economics/conservation_economics/) web site <http://www.defenders.org/programs_and_policy/science_and_economics/conservation_economics/>.

A final technical report in the form of a Conservation Economics White Paper will be made available in hard copy, electronic copy, and posted on the WHPRP and Defenders of Wildlife websites.

A White Paper on the issue of price endogeneity (factors determined within the system) affecting cost estimates of implementing the state plans will be completed by December 31, 2008.

PowerPoint presentations are being developed for public and private land conservation agencies and organizations, scientists involved in land conservation, wildlife habitat conservation policy makers and general audiences. Presentations have been made to Defenders staff, to senior staff of the Association of Fish and Wildlife Agencies, to national conservation groups and to a plenary session at the annual meeting of the Association of Fish and Wildlife Agencies.

Defenders of Wildlife will provide a synopsis of the cost findings in an outreach document and fact sheets to public and private policy makers, land use planners and researchers who work with wildlife habitat conservation.

The results of the cost study will be summarized and submitted to a peer-reviewed journal for publication.