

**U.S. Fish and Wildlife Service, National Wildlife Refuge System
Briefing Statement**

Title: Optimizing the Allocation of Land Acquisition Funds

Updated: August 15, 2011

Issue: The Refuge System sets its priorities for land acquisition in a way that systematically accounts for conservation benefits without systematically accounting for costs. This approach is inconsistent with recent Administration guidance.

Background: A July 2011 White House report, *Sustaining Environmental Capital: Protecting Society and the Economy*, calls for federal agencies to “increase the positive impact of conservation expenditures by giving highest priority to those expenditures that maximize the conservation benefits gained for each dollar invested” (p.47). Maximizing the benefit:cost ratio is also known as “optimization.” The White House report specifically cites the Land and Water Conservation Fund as an example of funding that should be optimized. The report notes that “Return on investment is already federal policy” based on Executive Order 13514 (Oct. 5, 2009) (p.52). Federal conservation agencies are also called to submit annual reports explaining “why they chose to use a particular method for determining investment effectiveness” (p.54).

The primary source of Refuge System land acquisition funding is the Land and Water Conservation Fund (LWCF). Also, the Refuge System has more control over the allocation of LWCF funds than other land acquisition funds (such as the Migratory Bird Conservation Fund). The Refuge System uses the Land Acquisition Priority System (LAPS) to steer the allocation of LWCF funds. LAPS is a set of ecological criteria used to rank potential Refuge System acquisition projects. Each year, the LAPS list is a starting point in ranking projects for funding, and final LWCF allocations mirror the LAPS list to a substantial extent.

LAPS does not account for land acquisition costs; i.e., it does not optimize the allocation of funding. This has long been recognized as a shortcoming of the Refuge System approach to prioritizing projects. Several times in the past 10 years, Refuge System leadership has expressed the intent to systematically incorporate costs in ranking projects.

Recommendation: Divide LAPS score by cost/acre to optimize the ranking of projects for LWCF funding. This is the method suggested by the White House report, which states, “Even when cost is considered, it is often only one variable rather than the denominator in a cost-effectiveness calculation... which results in a flawed assessment.” FWS internal analysis also indicates that land acquisition costs are substantial and measurable enough to be incorporated effectively in an optimization process, while other costs (such as Operations and Maintenance) are not. Optimization should commence with the FY13 project list pursuant to EO 13514 and the new White House report.

Contact: Brian Czech, Conservation Biologist, National Wildlife Refuge System, Division of Natural Resources and Conservation Planning, 703-358-2485, Brian_Czech@fws.gov.

Title: Benefit-Cost Assessment and LAPS

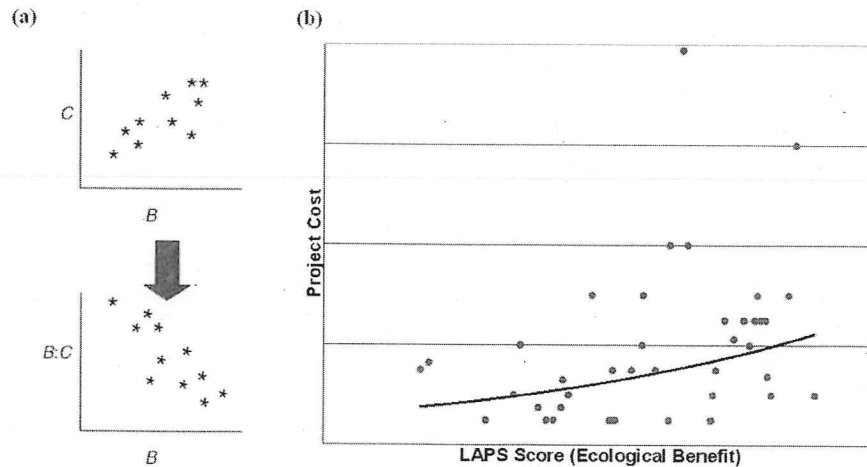
Project/Issue: The Land Acquisition Priority System (LAPS) could be enhanced as a prioritization tool with the addition of benefit-cost assessment. Benefit-cost assessment provides a business filter for LAPS, allowing for increased conservation efficiency and thus greater effectiveness toward meeting Refuge System goals.

Background: LAPS is a set of criteria used to rank potential Refuge System acquisitions in terms of their ecological value. Each year, approximately 100 proposed projects are ranked according to LAPS score. The final ranked list influences Congress' appropriation of Land and Water Conservation Fund dollars.

Advantages of Benefit-Cost Assessment:

- *Maximizes the ecological benefits gained per dollar spent (efficient)*
- *Fiscally accountable* given pressure to (a) justify the value of acquisitions and to (b) show that these acquisitions were the best purchases to be made
- *Corrects the inaccurate assumption of land price homogeneity*
- *Appropriate given high variation of costs*— In cases where project costs show more variation than benefits, efficient conservation depends more strongly upon cost assessment than how (or even if) benefits are measured (Figure 1)
- *Supported by extensive research*
- *Easy to incorporate*— Acquisition costs are already made available through the Project Summary component of LAPS

Figure 1. Figure 1a shows that when benefits and costs are positively correlated, a high benefit-cost ratio cannot be inferred from high benefits alone. This is visibly also the case with LAPS scores; high-scoring projects tend to bear high costs (Figure 1b).



Contact: Becky Huncosky, National Wildlife Refuge System, Division of Natural Resources, 703-358-2672, Rebecca_Huncosky@fws.gov