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Conservation Thresholds for Land Use Planners

**A Wingspread Conference Sponsored by
The Environmental Law Institute
The Surdna Foundation
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and
The Johnson Foundation**

Top Implementation Strategies

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Introduction

On March 21-23, 2007, the Environmental Law Institute (ELI) and the Johnson Foundation hosted a conference, ***Conservation Thresholds for Land Use Planners***, at the Foundation's Wingspread Conference Center in Racine, Wisconsin. The conference was supported by generous grants from the Surdna Foundation and the George Gund Foundation. The goal of the conference was to advance the field of conservation planning by identifying robust and measurable implementation strategies that support the development and application of science-based conservation thresholds. Conservation planning is defined by the development of biologically defensible plans that maintain natural habitat in the amount, configuration, and quality safely above the threshold at which population viability and richness of native species begins to decline precipitously.¹

Conference participants included a small group of accomplished land use planners, conservation biologists, and public policy practitioners (see Participants).

This paper lays out the top implementation strategies identified at the Wingspread conference. The four broad categories of implementation to emerge from the Wingspread conference are:

- Interdisciplinary research in support of conservation planning;
- Communicating the centrality of conservation planning to decisionmakers;
- Outreach materials to support proactive conservation planning;
- Research on economic and political incentives for conservation planning; and
- Professional outreach.

ELI plans to play a role in directly implementing some of the identified strategies, as well as help others pursue these ideas into the future. Additional information on ELI's Conservation Thresholds Project and complete notes from all of the conference breakout and plenary sessions and can be found at:
<http://www2.eli.org/research/thresholdsconference.htm>.

¹ Noss, R.F. 2007. Conservation Thresholds: Overview and Commentary. In Kihlsinger, R.L. and J. Wilkinson (eds.) *Lasting Landscapes: Reflections on the Role of Conservation Science in Land Use Planning*. Washington D.C.: Environmental Law Institute.

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Conservation Thresholds for Land Use Planners

A Wingspread Conference

1: Interdisciplinary Research in Support of Conservation Planning

In the next 3-6 months, ELI hopes to convene a group of researchers/academics with the explicit purpose of writing an interdisciplinary, systematic, rigorous grant proposal to link conservation biology with land use planning. The grant would support interdisciplinary research that would advance our understanding of: 1) the consequences of growth and development on biodiversity; and 2) effective mechanisms that support conservation planning through the integration of science-based information and planning. The grant proposal would be geared to the following funding sources: NSF, NASA, USDA, EPA Star, and NOAA.

Possible areas of interdisciplinary research include:

- Develop procedural guidelines for conservation planning to guide municipalities to:
 - Identify core problems
 - Identify appropriate science-based information
 - Outline the 7-10 “magical” data layers that communities need to guide conservation planning (including ecological baseline data and data on the built environment)
 - Identify sources of local expertise
 - Integrate the appropriate information into the decision-making process
- Undertake a comparative study of effective mechanisms that support conservation planning through the design and delivery of a series of planning charettes across a set of representative communities. Key components would include:
 - Development of quantifiable and consistent metrics to ensure that the results are comparable across communities
 - Working in a cross-section of individual communities with a group of stakeholders (i.e., planners, elected officials, etc.)
 - Selection of communities based on ecoregional representation and a range of planning expertise/capacity
 - Secure co-sponsorship of charettes by partner groups, i.e., American Planning Association, Society of Conservation Biology
 - Identification of communities’ planning/information needs and limitations
 - Determination of how the communities currently use ecological information and conservation planning tools
 - Analysis of how communities with different ranges of expertise and technological capacity use the procedural guidelines
 - Identification of short- and long-term payoffs of adopting the conservation planning approach
- Identify where the pace of sub- and ex-urban growth is now, or will soon be, a significant threat to biodiversity to:
 - Determine where pro-active conservation planning will be most effective
 - Develop effective messages on the economic and political benefits of

- proactive conservation planning
 - Identify where to target application of conservation planning tools
- Conduct empirical research on alternative growth scenarios, resulting patterns of development, and the associated economic, social, and biological trade-offs
- Conduct national outcomes study on the effectiveness of conservation-based plans and planning tools to protect biodiversity
- Conduct policy/legal research on how conservation planning has been upheld in the courts

Participants would include academics from fields of the land use planning, conservation biology, and economics.

#2: Communicating the Centrality of Conservation Planning to Decisionmakers

In the next 6-12 months, ELI hopes to commission a communications expert to develop and disseminate a set of communications and outreach tools that will advance the field of conservation planning. The goals of the communications effort will be to:

- Develop a core story based on central values (e.g., livable communities, nature-friendly communities, healthy communities)
- Identify audiences and their values
- Test the story through workshops in 4-6 regions of the country
- Develop a kit of tools to communicate the story and solutions
 - Talking points
 - Presentations for delivery at professional meetings
 - “How-To” manual for conservation planning
 - Outreach and training materials for circuit-riders
- Develop a dissemination strategy

The following individuals/organizations will serve on an advisory committee to oversee development of the communications tools. Key leaders from each of these organizations will also be identified:

- American Society of Landscape Architects
- American Planning Association
- Ecological Society of America
- International City/County Managers Association
- Local Government Environmental Assistance Network
- National Association of Counties
- National Association of County Planners
- National Association of Environmental Professionals
- National Association of Local Government Environmental Professionals
- National Association of Regional Councils
- NatureServe
- Society of Conservation Biology
- Sonoran Institute

Other Possibilities:

- Association of Fish and Wildlife Agencies
- International Municipal Lawyers Association

#3: Outreach Materials to Support Proactive Conservation Planning

In the next 24 – 36 months, ELI hopes to work in partnership with an interdisciplinary group of planners, biologists, economists and others to develop the following materials:

A. Primer on Best Practices for Conservation Planning

Develop a primer on best practices for conservation planning, drawing from the interdisciplinary research (#1) on procedural guidelines. Derivative products would be tailored to conservation biologists, local government planners, and other key audiences.

The primer will highlight the five strategic points of intervention for planning. It will lay out a decision-making protocol (i.e., procedural guidelines) for how to identify core problems, access appropriate science-based information, and incorporate biological information into planning at each strategic point of intervention.

The strategic points of intervention are:

1. Visioning and long-range community planning
2. Plan making: Comprehensive planning, sub area planning, downtown planning, functional planning (i.e., open space planning, smart growth planning), and infrastructure planning
3. Development of regulatory tools: Zoning ordinances, subdivision ordinances, incentive programs, agricultural preservation programs, transfer of development rights programs, etc.
4. Site plan review and approval
5. Public investments: Utilities, libraries, water, etc.
6. [Monitoring]
7. [Enforcement]

B. Wildlife on the Edge

Drawing from the interdisciplinary research (#1) on where the pace and location of sub- and ex-urban growth will soon be a significant threat to biodiversity, develop a short report with maps. Target the findings to the appropriate audiences. Include communications messages and provide strategies for proactive implementation of conservation planning, coupled with the primer on best practices and economic arguments.

#4: Research on Economic and Political Incentives for Conservation Planning

In the next 12-24 months, ELI hopes to commission a coordinated set of research papers to develop economic and political arguments for supporting pro-active conservation planning by communities. These research papers will include those on:

- The economic trade-offs of failing to undertake proactive conservation planning
- The political trade-offs of failing to undertake proactive conservation planning

The results of the research, along with accessible findings and tables of results, will be published in local government management journals and association publications. Possible target publications include those of International City/County Managers Association, National Governors Association, U.S. Conference of Mayors, National League of Cities, National Association of Counties, National Association of Local Government Environmental Professionals, and National Association of Regional Councils.

#5: Professional Outreach

In the next 12-36 months, ELI hopes to conduct coordinated outreach to key professional groups to disseminate the findings and tools developed through this project. Outreach activities will include:

A. Strategic Outreach and Coordination between Local Government Planning and Conservation Biology Communities

- Conduct strategic outreach and coordination between the two disciplines (i.e., APA and SCB) to encourage:
 - The development of a model conservation planning curriculum for accredited planning programs and conservation biology academic programs
 - Highlight conservation planning through APA's suite of products (i.e., best practices manual on conservation planning; audio web conferences; Planner Training Services; Plug-and-play training; articles in serial publications, i.e., Zoning Practice; a policy guide on biodiversity)

B. Support the Development of a Conservation Planning Technical Support Infrastructure

- Explore opportunities to establish a technical support infrastructure that will provide on-going support to planning entities from agencies and organizations with technical expertise, for example
 - Explore establishment of state-specific network of conservation professionals that are willing to provide ecoregionally specific expertise. This could take several forms, including:
 - The establishment of staffed "locality liaison" program in each state Natural Heritage Program office that can provide technical support to provide and interpret scientific data for planners.
 - The establishment of a Conservation Planning Circuit Rider Program – trained conservation planning experts who are available to facilitate dialogues among planners, elected officials, and other key stakeholders
 - Establishment of a forum for professionals with scientific expertise to expand across boundaries and provide technical support to planners. Professionals could be drawn from local chapters of Ecological Society of America, The Nature Conservancy, The Wilderness Society, academic institutions, land grant and sea grant universities, wildlife managers and other practitioners, Cooperative Extension Service units, Natural Heritage Programs, etc. and organized through
 - Establishment of a speakers bureau/database of professionals and their respective areas of expertise
 - Convening regionally based interdisciplinary meetings supported by web-based communities