

**Summary Minutes of the
U.S. Environmental Protection Agency (EPA)
Meeting of the Regional Subcommittee on Valuation for Regional Decision Making of the Science
Advisory Board (SAB)
Committee on Valuing the Protection of Ecological Systems and Services (C-VPESS)
Public Meeting – April 28, 2006**

Committee Members: (See Roster – Attachment A)

Scheduled Date and Time: From 10:00 a.m. to 12:00 p.m. (Central Time) on April 28, 2006. (See Federal Register Notice, Attachment B)

Location: US EPA Region 5 Offices Room 611, The Ralph Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, Illinois

Purpose: The purpose of this fact-finding meeting is for the (C-VPESS) Subcommittee to gather information related to ecological valuation activities of interest to EPA Region 5 in its work with Chicago Wilderness.

<u>Attendees:</u>	Acting Subcommittee Co-Leads	Dr. Ann Bostrom. Dr. Stephen Polasky
	Committee Members:	Dr. Dennis Grossman Dr. Louis Pitelka (by phone) Dr. Paul Risser Dr. Holmes Rolston Dr. Barton H. (Buzz) Thompson, Jr
	SAB Staff Office:	Dr. Angela Nugent, SAB Staff Office, Designated Federal Officer (DFO)
	EPA Staff:	Mr. James Van der Kloot, Region 5 Ms. Karen Bandhauer, Region 5
	Members of the Public	Dr. Lenore Beyer-Clowe, Openlands Project Dr. Chris Mulvaney, Chicago Wilderness Dr. Brooke Hecht, Center for Humans and Nature Mr. Jesse Elam, Northeast Illinois Planning Commission Mr. William Eyring, Center for Neighborhood Technologies

Meeting Summary

The discussion generally followed the Proposed Meeting Agenda (See Meeting Agenda - Attachment C).

Opening of Public Meeting

Dr. Angela Nugent, Designated Federal Officer (DFO) welcomed the public attendees for the fact-finding session. Dr. Stephen Polasky asked the C-VPES Co-Chair, Dr. Buzz Thompson, to provide a brief summary of the overall charge of the C-VPES and the specific role of the regional subcommittee. Dr. Thompson provided an introduction to the committee's work. He described the broad scope of the C-VPES charge (looking at the whole scope of valuation, from the reasons why people care about ecosystems and ecological resources, through ecological assessment, monetary and non-monetary valuation, and communication about ecological valuation). He described the broad composition of the committee and the subcommittee.

Dr. Nugent then distributed a list of questions prepared by subcommittee members for the April 28th meeting (Attachment D) and confirmed that members of the public had received the "Overview" document (Attachment E) that had provided an introduction to Chicago Wilderness activities for the subcommittee.

Discussion

Drs. Polasky and Bostrom asked members of the public to discuss the relevance of valuation to their goals and work. EPA staff responded that EPA is generally interested in tools that can help make choices about "where to establish green infrastructure." A member of the public commented that choices about development in the western suburbs could be guided by information about the value of preserving ground water and other ecosystem services related to clean water. Another member of the public commented that the Chicago Wilderness Sustainability Team considered ground water issues. Members of the public spoke throughout the session about how Chicago Wilderness made choices regarding the funding of research projects; valuation could be useful in that context.

Later on in the discussion members discussed how valuation might be useful in their own organizations and in their work with Chicago Wilderness. One member of the public noted that at the Center for Neighborhood Technology, there is a serious effort to assign numbers to "a lot of things." He pointed the subcommittee to the website <http://greenvalues.cnt.org/calculator>, a tool to compare conventional development with changes made with naturalized storm water development. The goal is to show how "doing something right is cheaper than doing it wrong" and where development decisions that have positive impacts on the environment might be in the financial interest of the developer. A member of the public mentioned that Chicago Wilderness had several years ago funded a study looking at downstream economic impacts of two different types of development -- conservation vs regular style development. The study showed that the cost of conservation style development is considerably lower for an individual lot.

An EPA staff person noted that two of the initial projects of Chicago Wilderness were an Atlas of Biodiversity and the Biodiversity Recovery Plan. He noted that in some cases, as with storm water issues, societally beneficial investments seem to have higher costs than conventional development. Valuation of the benefits to society as a whole would be useful to help construct incentive systems to address situations where societal benefits, but not immediate benefits to developers, outweigh the costs of developments designed to support biodiversity protection. Other members of the public noted

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examples where there were conflicts involving ecological protection where valuation could be helpful. One example involved King County, where a nesting pair of raptors was present in the midst of 10,000 acres to be developed and a controversy over whether enough land could be saved so that raptors could come back to nest. Some streams affected by development contain native species that are vulnerable (minnows, garters, rare dragon flies) but are not charismatic species and do not capture popular attention.

The group also discussed the potential of valuation in the acquisition of lands by forest preserve districts and soil conservation districts. Local bond issues also often raise the issue of open space. Valuation information can help voters put a value on biodiversity to help them make decisions related to voting on bond issues and interactions with elected officials and local developers.

A member of the public also talked about the potential of valuation to strengthen the usefulness of the spatial data systems available to Chicago Wilderness. She noted that the Openlands Project has developed a green mapping tool together with the Center for Neighborhood Technology (see <http://www.greenmapping.org/>). The tool currently is not fully interactive and easily understandable by the lay public. To make it more useful to the general public the policy importance of different data layers needs to be made more explicit (e.g., users would benefit by being able to bring up the hydric soil layer and evaluate the importance of some change). Valuation techniques would make such a tool more useful for policy applications.

The public meeting also included a discussion of how Chicago Wilderness operates and makes decisions. A member of the public explained that Chicago Wilderness had four teams: a natural resources team that focuses on areas that have been formally preserved; an education and outreach team; a sustainability team that focuses on how to enhance biodiversity in areas that have been built and are facing urban sprawl; and a science team. Chicago Wilderness also has a review panel that evaluates proposals. It evaluates proposals against criteria drawn from the Chicago Wilderness strategic plan; is informed by recommendations from the teams, and looks for collaborative proposals that can obtain funding from other sources.

Members of the public described the history of Chicago Wilderness, which began in 1996 with 34 organizations, principally county forest preserve districts and natural history/science organizations. The organizations that joined were interested in collaboration to achieve biodiversity goals difficult for individual organizations alone. The initial focus was on natural, preserved areas. The formal name of the organization is the "Chicago Regional Biodiversity Council; "Chicago Wilderness" was a nickname used early in the organization's history. A member of the public noted that the organization's recent growth had prompted strategic planning and a more formal approach to decision-making and priority setting. Another member noted that a majority of the founding members were restorationists and preservationists; many of the issues raised by the Sustainable Development team were new. Work on the Biodiversity Recovery Plan has helped Chicago Wilderness address the needs of these different interests within its organization.

An EPA staff person noted that EPA benefits from working with Chicago Wilderness; the agency gains knowledge and insights related to its work in land revitalization and ecological and storm water aspects of reuse. He also noted that EPA's Great Lakes National Program Office views Chicago Wilderness as offering an opportunity to work with partners to address ecological issues throughout the

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Great Lakes Basin. Other members of the public commented that Chicago Wilderness fosters intellectual exchange across disciplines and organizations.

A member of the public noted that Chicago Wilderness had a “ponderous” process for decision making and very broad goals, which sometimes seem “nebulous.” Another member of the public noted that the organization had seven to nine direct employees and is in the process of hiring an executive director. The organization has an Executive Council that meets four times per year and focuses on implementation of the strategic plan. The organization has an elected 25-seat Steering Group whose members serve terms of two or three years. This Steering Committee oversees the directors of the teams, Chicago Wilderness decisions, and the Executive Director. Chicago Wilderness is a 501c3 organization, so its members are not-for-profit entities. It has an affiliated corporate council. Chicago Wilderness currently has two principal funders (one of which is the US Fish and Wildlife Service) and is hoping to increase and diversify the funding it receives from private members and foundations.

Near the conclusion of the meeting a member of the public noted the importance of environmental education for Chicago Wilderness. Over 200,000 acres are being managed through the help of volunteers, who give their time and energy and become educated about native species.

The discussion concluded at 12:00 p.m. The subcommittee expressed its thanks for the information provided by members of the public.

Respectfully Submitted:

Angela Nugent
Designated Federal Officer

Certified as True:

/Signed/
Ann Bostrom
Co-Lead

/Signed/

Stephen Polasky
Co-Lead

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters, or reports prepared and transmitted to the EPA Administrator following the public meetings.

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Attachments

Attachment A Roster of Subcommittee Members

Attachment B Federal Register Notice

Attachment C Meeting Agenda

Attachment D Questions for the Chicago Wilderness from the C-VPESSE Subcommittee on Valuation for Regional Decision Making

Attachment E Overview of Chicago Wilderness

Attachment A: Roster of Subcommittee Members

**U.S. Environmental Protection Agency
Science Advisory Board
Committee on Valuing the Protection of Ecological Systems and Services
Subcommittee on Valuation for Regional Decision Making Involving Partnerships**

CO-LEADS

Dr. Ann Bostrom, Associate Professor, School of Public Policy, Georgia Institute of Technology, Atlanta, GA

Dr. Stephen Polasky, Fesler-Lampert Professor of Ecological/Environmental Economics, Department of Applied Economics, University of Minnesota, St. Paul, MN

MEMBERS

Dr. James Boyd, Senior Fellow, Director, Energy & Natural Resources Division, Resources for the Future, Washington, DC

Dr. Dennis Grossman, Vice President for Science, Science Division, NatureServe, Arlington, VA

Dr. Louis F. Pitelka, Professor, Appalachian Laboratory, University of Maryland Center for Environmental Science, Frostburg, MD

Dr. Paul G. Risser, Chancellor, Oklahoma State Regents for Higher Education, Oklahoma City, OK

Dr. Holmes Rolston, University Distinguished Professor, Department of Philosophy, Colorado State University, Fort Collins, CO

Dr. Joan Roughgarden, Professor, Biological Sciences and Evolutionary Biology, Stanford University, Stanford, CA

Dr. Barton H. (Buzz) Thompson, Jr., Robert E. Paradise Professor of Natural Resources Law and Vice Dean, Stanford Law School, Stanford University, Stanford, CA

SCIENCE ADVISORY BOARD STAFF

Dr. Angela Nugent, Designated Federal Officer, 1200 Pennsylvania Avenue, NW 1400F, Washington, DC, Phone: 202-343-9981, Fax: 202-233-0643, (nugent.angela@epa.gov)

Attachment B: Federal Register Notice

Science Advisory Board Staff Office; Notification of a Upcoming Meeting of a Subcommittee of the Science Advisory Board Committee on Valuing the Protection of Ecological Systems and Services

[Federal Register: April 12, 2006 (Volume 71, Number 70)]

[Notices]

[Page 18732]

From the Federal Register Online via GPO Access [wais.access.gpo.gov]

[DOCID:fr12ap06-51]

ENVIRONMENTAL PROTECTION AGENCY

[FRL-8158-1]

Science Advisory Board Staff Office; Notification of a Upcoming Meeting of a Subcommittee of the Science Advisory Board Committee on Valuing the Protection of Ecological Systems and Services

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The EPA Science Advisory Board (SAB) Staff Office announces a public meeting of a Subcommittee of the Science Advisory Board Committee on Valuing the Protection of Ecological Systems and Services (C-VPES) to gather information related to ecological valuation activities of interest to EPA Region 5 in its work with Chicago Wilderness.

DATES: A public fact-finding meeting of the C-VPES will be held from 10 a.m. to 12 p.m (Central Time) on April 28, 2006.

ADDRESSES: The meeting will take place in Room 61 of the Ralph Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: Members of the public wishing further information regarding the SAB C-VPES subcommittee meeting may contact Dr. Angela Nugent, Designated Federal Officer (DFO), via telephone at: (202) 343-9981 or e-mail at: nugent.angela@epa.gov. The SAB mailing address is: U.S. EPA, Science Advisory Board (1400F), 1200 Pennsylvania Avenue, NW., Washington, DC 20460. General information about the SAB, as well as any updates concerning the meeting announced in this notice, may be found on the SAB Web site at: <http://www.epa.gov/sab>.

SUPPLEMENTARY INFORMATION: The SAB was established by 42 U.S.C. 4365 to

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provide independent scientific and technical advice, consultation, and recommendations to the EPA Administrator on the technical basis for Agency positions and regulations. The SAB is a Federal advisory committee chartered under the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C., App. The SAB will comply with the provisions of FACA and all appropriate SAB Staff Office procedural policies.

Background

Background on the SAB C-VPES and its charge was provided in 68 FR 11082 (March 7, 2003). The purpose of this fact-finding meeting is for the Subcommittee to gather information related to ecological valuation activities of interest to EPA Region 5 in its work with Chicago Wilderness.

The Subcommittee will evaluate this information in drafting a component of a planned report on application of methods for valuing the protection of ecological systems and services. This fact-finding activity is related to the Committee's overall charge: to assess Agency needs and the state of the art and science of valuing protection of ecological systems and services and to identify key areas for improving knowledge, methodologies, practice, and research.

Availability of Meeting Materials

Materials in support of this meeting will be placed on the SAB Web site at <http://www.epa.gov/sab/> in advance of this meeting.

Procedures for Providing Public Input

Interested members of the public may submit relevant written or oral information for the SAB to consider during the advisory process.

Oral Statements: In general, individuals or groups requesting an oral presentation at a public meeting will be limited to five minutes per speaker, with no more than a total of one hour for all speakers. Interested parties should contact Dr. Nugent, DFO, at the contact information noted above, by April 20, 2006, to be placed on the public speaker list for the April 28, 2006 meeting.

Written Statements: Written statements should be received in the SAB Staff Office by April 20, 2006, so that the information may be made available to the Subcommittee for their consideration prior to this meeting. Written statements should be supplied to the DFO in the following formats: one hard copy with original signature, and one electronic copy via e-mail (acceptable file format: Adobe Acrobat PDF, WordPerfect, MS Word, MS PowerPoint, or Rich Text files in IBM-PC/Windows 98/2000/XP format).

Meeting Access

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For information on access or services for individuals with disabilities, please contact Dr. Angela Nugent at (202) 343-9981 or nugent.angela@epa.gov. To request accommodation of a disability, please contact Dr. Nugent, preferably at least 10 days prior to the meeting to give EPA as much time as possible to process your request.

Dated: April 7, 2006.
Anthony Maciorowski,
Associate Director for Science, EPA Science Advisory Board Staff Office.

Attachment C: Agenda

**Meeting of the Subcommittee on Valuation for Regional Decision Making, SAB Committee on
Valuing the Protection of
Ecological Systems and Services (C-VPES)**

April 28, 2006

**US EPA Region 5 Offices Room 611
The Ralph Metcalfe Federal Building
77 West Jackson Blvd.
Chicago, Illinois
Draft Agenda**

Purpose: The purpose of this fact-finding meeting is for the (C-VPES) Subcommittee to gather information related to ecological valuation activities of interest to EPA Region 5 in its work with Chicago Wilderness.

Proposed Agenda

10:00 – 10:10	Opening of Public Meeting ,Welcome, and Introductions	Dr. Angela Nugent, Designated Federal Officer Drs. Stephen Polasky and Ann Bostrom, Subcommittee Co-Leads
10:15 – 11:45	Discussion and fact-finding related to ecological valuation activities of interest to EPA Region 5 and Chicago Wilderness	C-VPES Members
11:45 – 12:00	Summary of next steps	Drs. Stephen Polasky and Ann Bostrom, Subcommittee Co-Leads

**Attachment D: Questions for the Chicago Wilderness from the C-VPES
Subcommittee on Valuation for Regional Decision Making**

- (1) Do EPA Region 5 and Chicago Wilderness have specific needs for SAB's help in valuation in the following areas: monetization, other kinds of quantification of values, or qualitative efforts to identify values?

- (2) From materials provided, the SAB C-VPES Subcommittee understands that public involvement is a key principle for the Chicago Wilderness.
 - a. How does Chicago Wilderness reach out to its broad set of stakeholders, and additional stakeholders? How was the Chicago Region Biodiversity Council initially started?
 - b. How did it evolve into Chicago Wilderness?
 - c. How does Chicago Wilderness make decisions? How does the Chicago Wilderness operate on a day-to-day basis and in the longer term? Where can we find a summary of fiscal and administrative management goals and plans for the CW?
 - d. How does Chicago Wilderness decide who will be invited to participate in its workshops? How does Chicago Wilderness relate to Chicago Parks and Recreations? To the City department of public works? Chicago Park district is a member of the consortium, as is Chicago Department of the Environment – what role do they play?

- (3) Regarding inventory of geospatial data layers for the conservation areas *and* the surrounding, developed communities:
 - a. The Green Mapping project includes more than 200 spatial data sets, most of which appear to be in GIS layers sponsored by a number of different agencies. Have these data been reconciled and focused on issues for priority acquisitions, comparative value or productivity or for other synthetic purposes within the project?
 - b. The very thorough and thoughtful discussions of the Chicago Wilderness region and the strategic planning are seemingly quite separate from the spatially-referenced data bases that have been cataloged. How were the data used to reach the current analysis of the various ecosystems, and were the data explicitly used to guide the recommendations for the short-term and long-term strategic recommendations?
 - c. One of the most significant recommendations is that *by 2007, the Chicago Wilderness will have agreed to a suite of indicators measuring quality of each community and the processes that sustain them.* Have there been any preliminary decisions about the nature of these indicators, and if so, are the GIS data sets involved in their determination?
 - d. Has CW mapped single or multiple spatial solutions that would meet the desired future condition for a) biological, b) ecological and c) ecological services targets and goals throughout the planning region? If so, what

methods were used for these spatial analyses, and did they meet your needs?

(4) Biological and Ecological Targets

- a. Has the Chicago Wilderness (CW) identified specific biological and ecological targets (species, vegetation types, terrestrial and aquatic ecological systems, stream habitats, lakes, etc.) to protect and sustain into the future? If so, what methods were used to select these biological and ecological targets, and did they meet your needs? [Note: We recognize that the Biodiversity Recovery Plan identifies a very large number of such targets, and that workshops and expert group consultations were used to identify many of these]
- b. Do you have specific target goals (i.e. acres of tallgrass prairie, linear miles of stream segments, populations of rare or endemic species, etc.) that have been identified as a desired future condition for the CW area? Do you have ecological service goals (i.e. number/acreage of wetlands, acres of open space, vegetation buffers for natural waterways, etc.) that have been identified as a desired future condition for the CW area?
- c. Has the CW provided different values to its conservation targets and, if so, how were those values developed?
- d. What benefits arising from the preserves are considered most important by the local and regional community? Examples of benefits include particular forms of recreation, flood prevention, water storage, visual amenities, habitat support. How would the public rank what is important about these areas?

(5) What specific management actions is the Chicago Wilderness considering (if any) and find politically realistic and economically feasible? What management actions does Chicago Wilderness consider/analyze on behalf of its members? Examples of management actions include preservation (fee simple, easement), land management (selective harvest & removal, cultivation, changes in land use), water management (wetlands enhancement or restoration, timing of flow and storage).

- a. For management actions considered by the Chicago Wilderness, what is known about the biophysical production function? Can predictions be made about the effect of management actions on biophysical “lift and loss” of various kinds? Examples of “lift and loss” include species population impact, changes in land cover, changes in timing and flows of water.
- b. Has CW developed a process for monitoring the progress on implementing the spatial solutions, and incorporating the dynamics of land use change and new information into the planning solutions. If so, what methods were used for these spatial analyses, and did they meet your needs?

- (6) Does EPA have a vested interest in everything that Chicago Wilderness does? To what extent do the goals and missions of EPA and the Chicago Wilderness overlap or coincide? Diverge?

**Draft Overview (March 2006) developed for C-VPESS Subcommittee to Assist SAB Deliberations --
Do not Cite or Quote**

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Attachment E:

Overview of Chicago Wilderness - Green Infrastructure Mapping as a Decision-Support Tool for C-VPESS Subcommittee

Valuation Issues: There are a number of valuation issues germane to C-VPESS that arise in the context of the Chicago Wilderness Source Example. What are the values from protecting greenspace in the Chicago region? How does the conservation of greenspace contribute to biodiversity protection? How does the conservation of greenspace contribute to other ecosystem services such as recreation, aesthetics and water quality? What are the values associated with biodiversity protection and with other ecosystem services? How can the values associated with the conservation of greenspace be compared with the values of other development options?

EPA Decision/Reason for Valuation:

The Chicago Wilderness consortium is an alliance of more than 180 public and private organizations that have as their common goals “to restore the region's natural communities to long term viability, enrich local residents' quality of life, and contribute to the preservation of global biodiversity.” EPA Region V is a member of the Chicago Wilderness consortium, interested in implementing a Green Infrastructure Vision through Green Infrastructure Mapping, in order to protect biodiversity in the Chicago area and to contribute to the overall mission of EPA. US EPA has also previously sponsored the consortium, which is currently sponsored by both public and private entities, including other federal agencies.

In the final 2004 report for the Green Infrastructure Vision, the Chicago Wilderness sustainability team notes the importance of identifying “at the community/municipal scale opportunities for the identification and protection of local green infrastructure that is important to biodiversity.” As the consortium moves forward, members, such as EPA Region V, and outside entities, such as local counties, will need information about the value of land purchases and other investments for biodiversity conservation efforts, both relative to other possible investments, as well as the relative value of specific efforts, for prioritization purposes, and to justify investments to their constituents where necessary.

The scope of the consortium’s work is described in Attachment 1 (pages 1-4 of the Strategic plan, and the Executive Summary from the Biodiversity Recovery Plan, web link on page 5).

Authority for and Genesis of Decision-Making

Chicago Wilderness is a consortium of public and private groups. There is no specific authority or decision-maker that guides the consortium or that mandates that certain analyses be undertaken (such as cost-benefit analysis). Chicago Wilderness pursues objectives as defined by its members (“to restore the region's natural communities to long term viability, enrich local residents' quality of life, and contribute to the preservation of

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Use of Cost-benefit Analysis and/or Cost-effectiveness Analysis

Neither EPA Regional offices nor the Chicago Wilderness are operating under any mandate to carry out cost-benefit analysis. The case could be made that the consortium has adopted the objective of sustaining biodiversity. Understanding the process by which Chicago Wilderness established its goals is worth examination. What methods did Chicago Wilderness use to assess member’s values? How were values of members aggregated to form the objective of the consortium? Taking the stated goal as given, there may be limited scope for valuation and cost-benefit analysis. In this case, it may be more appropriate for decision-making and prioritization of green infrastructure projects to use cost-effectiveness analysis. Application of cost-effectiveness analysis would still require knowledge of how various decisions affected biodiversity and the costs of these decisions, but estimates of the value of biodiversity may not be required.

Nothing prevents EPA or other decision-makers in the consortium from considering cost-benefit analysis, or an analysis comparing costs to the values associated with different options as part of the entire technical analysis supporting a decision. Information in cost-benefit analysis or an analysis comparing costs to the values associated with different options, can be useful by decision makers, especially for controversial issues. Analysts can provide both formal monetized and non-monetized cost-benefit analyses, supplemented with narrative description of non-quantifiable values, to explain the benefits of different green infrastructure development options.

Decision-maker who will use analysis: Public and private decision makers affiliated with the consortium, including EPA Region V.

Other audiences for valuation information:

Other audiences include: Interested and affected parties (e.g., Chicago area landholders, trade associations, environmental groups, and the technical experts hired by these parties).

Status of Valuation Work for Chicago Wilderness and Chronology of Valuation Effort:

Decision/document	Date	Source/URL
Biodiversity Recovery Plan	1999 (Award from APA in 2001 for best plan)	http://www.chicagowilderness.org/pubprod/brp/index.cfm Executive summary available at http://www.chicagowilderness.org/pubprod/brppdf/CWBRP_chapter1.pdf
Chicago Wilderness Green Infrastructure Vision	Final report, March 2004	http://www.nipc.org/environment/sustainable/biodiversity/greeninfrastructure/Green%20Infrastructure%20Vision%20Final%20Report.pdf
Green Infrastructure Mapping		http://www.greenmapping.org/
A Strategic Plan for the Chicago Wilderness Consortium (See attachment 1 for Introduction)	17 March 2005	http://yosemite.epa.gov/SAB/sabcvpress.nsf/06347c93513b181385256dbf00541478/72c1b26a9d2087568525713f005832e1!OpenDocument
Chicago Wilderness Regional Monitoring Workshop Final report, by Geoffrey Levin	February, 2005	http://yosemite.epa.gov/SAB/sabcvpress.nsf/06347c93513b181385256dbf00541478/8c33ee9115d706e68525713f005784e6!OpenDocument
Center for Neighborhood Technology (CNT) – green infrastructure valuation calculator	2006 (?)	http://greenvalues.cnt.org/calculator

The web page for the Chicago Wilderness (<http://www.chicagowilderness.org/>) contains a more complete chronology and links to many of these relevant documents, including the Biodiversity Recovery Plan.

Activities and Approaches in Other EPA Regions

EPA Regional offices seek opportunities to work with public and private partners to protect biodiversity and greenspace and to work on other ecological issues. Summarized below are analytical efforts underway in other regions to support goals that parallel Region V’s partnership effort with Chicago Wilderness and information about two previous SAB reviews of critical ecosystem efforts.

Title	Abstract	Web-link
<i>Environmental Accounting</i>	Working with Region 3, EPA ORD has	http://www.epa

<p><i>Using Emery: Evaluation of the State of West Virginia</i> EPA/600/R-05/006, March 2005</p>	<p>published an analysis of environmental accounting using emery approaches for the State of West Virginia</p>	<p>.gov/NHEERL/publications/files/wvevaluationposted.pdf</p>
<p>Hector, T., G. Lewis, et al. (2004). <i>Protecting Critical Ecosystems: Current EPA Regional Activities and Future Agency Opportunities</i>, Unpublished Report.</p>	<p>Unpublished 2004 Report funded by EPA's Office of Policy, Economics and Innovations and developed by Tom Hector, Ph.D. et al, Department of Landscape Architecture, University of Florida. Document inventoried current EPA Regional critical ecosystem assessments and other relevant projects to identify available data, methods, analytical tools, and gaps in available information. <i>Examined:</i> Region 2— NEPAssist internet GIS tool for impact assessment Region 4— Southeastern Ecological Framework (SEF) Region 5— Critical Ecosystems Assessment Model (CrEAM) Region 6— GIS Screening Tool (GISST) Region 7— Synoptic assessment of wetland function model Region 8— Environmental Monitoring and Resource (EMAP) water resources assessment Region 10— Rapid Access INformation System (RAINS)</p>	<p>http://yosemite.epa.gov/SAB/sabcvpess.nsf/06347c93513b181385256dbf00541478/b85f9626453f046d8525713f0056ac04!OpenDocument</p>
<p>EPA-SAB-05-011 <i>Review of the EPA Region 5 Critical Ecosystem Assessment Model (CrEAM)</i></p>	<p>An SAB panel reviews the methodology and conceptual framework used Region 5's Critical Ecosystem Assessment Model (CrEAM). The CrEAM was developed to identify ecologically significant areas in Region 5 in order to quantify and track ecosystem quality, target areas for protection, prioritize protection activities, and provide information to conduct National Environmental Policy Act reviews.</p>	<p>http://www.epa.gov/sab/pdf/cr_eam_sab-05-011.pdf</p>
<p>EPA-SAB-EPEC-LTR-02-002 <i>Review of the Southeastern Ecological Framework: An EPA Science Advisory Board Report</i></p>	<p>An SAB panel reviews the Southeastern Ecological Framework (SEF), a decision support system intended to identify remaining natural areas in the southeastern U.S. of highest value for conserving regional biodiversity. Developed</p>	<p>http://www.epa.gov/sab/pdf/ep_ecl02002.pdf</p>

Other Aspects of the Analytical Process

Data constraints:

The Green Mapping project includes over 200 data layers, many of which focus on land properties per se, but also endangered species and other attributes of the areas in the region. The CW recognizes the limitations in its data with regard to monitoring or characterizing biodiversity, as described in the Regional Monitoring Workshop final report and the Levin proposal for monitoring. While there are numerous relevant databases in addition to the green mapping project, many of these are not entirely accessible, and the data are in various formats and locations.

Resource constraints:

A list of member organizations of Chicago Wilderness can be found at:

<http://www.chicagowilderness.org/coalition/members/index.cfm>

The Center for Neighborhood Technology plays a critical role in the current green mapping efforts. Consortium members also contribute in various ways. Among the richest resources for the CW is its membership and history of careful attention to process.

Peer review:

While there is a ‘calculator’ that has just been developed by the Center for Neighborhood Technology, it has just been released and has not been peer reviewed.

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Attachment 1:

Part A:

Opening section of A Strategic Plan for the Chicago Wilderness Consortium

Introduction

Using the *Biodiversity Recovery Plan*, the Chicago Wilderness consortium has developed a strategic plan. While each member will contribute towards achieving the vision for the region according to its own mission and priorities, there is a unique niche and role that members can play when acting together as a consortium. This strategic plan guides the work of the consortium as a whole¹.

The strategic plan has a number of component parts, which are laid out in this document. In addition, there are two companion pieces. One companion document is A Chicago Wilderness Handbook: How the consortium works and how to get involved, which describes the structure of the organization as well as the processes it uses to operate. The Handbook also contains basic information about membership in Chicago Wilderness. The second companion piece is The Five Year Project Pipeline. The Five Year Project Pipeline is written as a separate document as it will be a living document – updated every year, and continually growing as new ideas emerge from Chicago Wilderness collaborative processes.

This document contains the following components:

- the vision
- the mission
- the basic beliefs
- the strategic foundations
- long-term objectives
- themes (strategic areas of work)
- short-term objectives.

The **vision** describes our desired future state for the Chicago Wilderness region. The **mission** describes how Chicago Wilderness as a consortium will work to achieve this vision, while the **basic beliefs** outline principles to which all Chicago Wilderness members agree and work. The **strategic foundations** outline the areas in which and strategies through which Chicago Wilderness will work. The **long-term objectives** outline the work that we as a consortium hope to achieve in order to bring about our vision. A number of strategies will be needed to achieve each of the long-term objectives. To organize thinking and logical order for implementing strategies, they have been grouped into strategic themes. The **themes** are groupings of strategies each of which needs to be undertaken (or has already been completed) to progress toward fulfilling the long term objective. For each theme, the consortium has identified **short term objectives**, which may also be considered as measures of success, as these short-

¹ This project was generously supported by the John D. and Catherine T. MacArthur Foundation

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term objectives are end states that the consortium plans to achieve by a specified date. Collectively, these short-term objectives will build upon one another to achieve the long term objectives.

Chicago Wilderness implements its work through collaborative projects. Each collaborative project undertaken by the consortium will work towards achieving a short-term objective, and thereby a long-term objective. As project ideas are formulated, they will be captured along with the short-term objectives in the Five Year Project Pipeline. The Five Year Project Pipeline will be a living document, because the both the short-term objectives and the projects in the pipeline will be updated each year to reflect what has been accomplished and what the next steps are. In this way, the consortium will be proactive and always have a plan that sets direction for the next five years.

Process to develop the Strategic Plan

In December 2003, the Chicago Wilderness Steering Committee initiated a strategic planning process. Since then, Chicago Wilderness (CW) has invested a significant amount of time, talent, and hard work to create this strategic plan. The plan's purpose is to provide a strategic framework, focus, and direction to the consortium's work for the next 10 – 15 years, as well as identify the operational structures, processes, and programs needed to support the consortium's leading edge, collaborative model.

The Steering Committee formed a core team to represent CW's membership during the planning process. The process was facilitated by Parks Consulting Group (PCG). PCG worked with the core team to customize a planning model and approach that would meet CW's unique needs. The model reflects the building blocks of the strategy and the iterative, inclusive approach used throughout.

In the first stage of the process, the core team gathered as much information and input as possible, from interviews, team meetings, a review of identified strengths, weaknesses, opportunities, and threats (also known as a SWOT analysis), a survey of all consortium members, and a review of CW literature and best practices. Using this information, the core team then discussed the issues and developed drafts that were reviewed at various points with subject matter experts, the Steering Committee, the Executive Council and other CW members. Feedback from the drafts was used to refine and prioritize the ideas. The resulting strategy is presented here and provides focus and direction for what the CW members want to accomplish.

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Vision for the Chicago Wilderness Region

We envision a future:

- Where accessible, interconnected, restored and healthy ecosystems contribute to economic vitality and quality of life for all residents in the Chicago metropolitan area;
- Where the region's abundant open spaces and natural communities are actively protected, restored, and managed to ecological health;
- Where people appreciate, take pride in, and provide support to our native ecosystems; and
- Where the resulting culture is one of conservation and stewardship of nature.

Mission for the Chicago Wilderness Consortium

To realize this vision, Chicago Wilderness is a consortium of organizations that champions biodiversity and its contribution to the quality of life in the urban, suburban, and rural areas of the Chicago Metropolitan region. Together, we work across the region to:

- Raise awareness and knowledge about the biodiversity and value of nature in our region, our neighborhoods, our workplaces, our schools, and our homes through formal and informal education.
- Increase and diversify public participation and environmental stewardship.
- Build alliances among the diverse constituencies throughout the Chicago region to foster a sustainable relationship with nature.
- Facilitate applied natural and social science research, best practices development, and information sharing.
- Generate broad-based public and private support and attract resources to achieve our goals.

Basic Beliefs of all Chicago Wilderness members

We believe that:

- People's lives are improved by a connection with nature.
- Healthy ecosystems and biodiversity are critical to a thriving, vital economy.
- The natural communities in our region, some globally rare, need to be actively managed and conserved.
- Our work is regional in nature and can transcend political and socioeconomic boundaries.
- The decisions that we make are based on the best scientifically defensible information and research programs available.
- Regional collaboration is the most effective way to achieve our goals.

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Long-term Objectives

In order to fulfill its mission and work towards its vision, the Chicago Wilderness consortium has identified the following long-term objectives. Each long-term objective encompasses many concepts and ideas. As such, each objective is explained in detail on the following pages. In addition, strategic areas of work and ways to measure progress for each objective are given. In summary, the long-term objectives for the Chicago Wilderness consortium are:

- The Chicago Wilderness consortium and its partners conserve the region's biodiversity by knowing and understanding the status and trends of biodiversity; soil, water, and air quality; and the biological, social, and economic factors that affect these resources.
- People in the region understand and value the importance of biodiversity, which is reflected in individual and institutional behaviors and decisions.
- The amount and quality of public and privately owned land and water in the region are adequate to recover and sustain regional biodiversity.
- Strategies used to meet these long-term objectives are best practices for conservation management that are the product of adaptive management as well as verification by on-going research programs in both the natural and social sciences.
- The CW consortium, its partners, and the region are successful models of collaboration and conservation action.
- Regional resources (financial and other) are sufficient for accomplishing these objectives.