FOREST CONSERVATION EASEMENTS: Who's keeping track?



THE U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES

About the Endowment

The U.S. Endowment for Forestry & Communities, Inc. (Endowment) is a not-for-profit corporation established at the request of the governments of the United States and Canada in accordance with the terms of the Softwood Lumber Agreement 2006 (SLA) between the two countries. The Endowment is one of three entities designated to share in a one-time infusion of funds to support "meritorious initiatives" in the U.S. The Endowment received \$200 million under the terms of the SLA.

Purposes

The Endowment has been chartered with two purposes:

1. Educational and charitable causes in timber-reliant communities; and 2. Educational and public-interest projects addressing forest management issues that affect timber-reliant communities or the sustainability of forests as sources of building materials, wildlife habitat, bio-energy, recreation, and other values.

VISION

America's forests are sustainably managed to meet broad societal objectives such as marketable products, clean waters, wildlife habitats and other ecological services, while ensuring healthy and vibrant forest-reliant communities.

MISSION

The Endowment works collaboratively with partners in the public and private sectors to advance systemic, transformative and sustainable change for the health and vitality of the nation's working forests and forest-reliant communities.



U.S. Endowment for Forestry and Communities P.O. Box 2364 Greenville, SC 29602 www.usendowment.org

INTRODUCTION

Since the early 1950s, when conservation easements were used primarily to protect pocket wetlands in the upper Great Plains, these highly versatile tools have evolved and matured. Today, easements are perhaps the most common vehicle for open space conservation. But from the standpoint of planning, conservation easements tend to "fly below the radar." A better understanding of the full "public estate" is especially important in the eastern United States, where private ownerships are the prevalent ownership type.

Which privately owned working forests are going to remain working forests because they are protected by easements? For conservation agencies and land trusts to continue their work without up-to-date conservation information is like trying to assemble a puzzle with pieces missing. The U.S. Endowment believes that it is vitally important to establish and maintain a system for viewing all conservation easement information at watershed, county, state, regional and perhaps even national scales.

Compiling information on conservation easements is more difficult, however, than determining the extent and location of protected public lands, whether held by local, state, or federal governments. Private landowners' perceptions and legitimate concerns about protecting their interests must be addressed.

Conservation easements are obtained and managed by federal agencies (like the Natural Resources Conservation Service and the U.S. Forest Service), state natural resources agencies, and nearly 1,700 local, regional, and national land trusts. Anyone wishing to access this information in aggregate for planning purposes faces several challenges:

• Each conservation program has its own objectives.

• Conservation organizations use different data management systems, from paper files to advanced geographic information systems.

• Most programs have few staff, and local land trusts in particular may have no permanent staff at all.

• Only a few systems maintain information about easements at the state or regional scale.

• Some information about easements on private land may be viewed as private.

In short, securing, cataloguing, and maintaining

information on conservation easements are difficult, yet the data are necessary to prioritize strategic acquisitions that will be effective in promoting wildlife habitat, ecosystem health, and watershed quality while retaining timberlands that support rural communities. This information will also help the U.S. Endowment for Forestry and Communities focus its efforts as it seeks to retain healthy working forests.

To further an understanding of the status of conservation easement data and related information, in February 2008 the U.S. Endowment invited representatives of public agencies and nongovernmental conservation interests to share updates on their individual data collection efforts and exchange ideas on how the information might be aggregated for mutual benefit.

The day-long session was divided into two segments. The first was designed to develop a shared understanding of current efforts by reviewing nine ongoing programs:

- LandScope America (NatureServe and National Geographic Society)
- NatureServe Forest Program
- Gap Analysis Program (U.S. Geological Survey)
- Conservation Almanac (Trust for Public Land)
- Protected Areas Database of the United States (Conservation Biology Institute)
- Conservation Registry (Defenders of Wildlife)
- Forest Legacy Program (U.S. Forest Service)
- Natural Resources Conservation Service (U.S.
- Department of Agriculture)
- Land Trust Alliance Census

The second segment of the meeting was spent in discussion about ways to advance data collection and sharing. All agreed that the inclusion of additional organizations and projects would have broadened the discussion.

This report (1) presents an overview of the current efforts, (2) summarizes the programs in tabular form, (3) records the main points of the discussion, and (4) considers next steps. An appendix (5) lists participants and acknowledges supporters. We hope that the document will engage the broader land stewardship community in thinking about how we might better plan individual efforts to capture synergies.

OVERVIEW OF CURRENT PROJECTS



LandScope America

www.landscope.org

Manager: NatureServe in collaboration with the National Geographic Society.

Primary funders: Private foundations for initial phase.

Scope: National.

Mission: To inspire and inform collaborative place-based conservation in the United States by increasing the pace and effectiveness of land-protection investments in every state.

Activities: LandScope seeks to increase the pace and effectiveness of land protection across the United States as a way of sustaining quality of life and economic prosperity by helping people understand the importance of remaining open space and focusing attention on priority lands and waters. It is creating a suite of online and print resources that encourage strategic, placebased conservation. To carry out its mission, LandScope America has the following objectives:

• guiding effective conservation action by highlighting land protection priorities established from a variety of perspectives, and helping people understand and appreciate the value of particular open spaces and natural lands;

• enabling local and regional land protection efforts by bringing together the best and most detailed information available about precious natural areas through building LandScope America partnerships in all 50 states (e.g., LandScope Colorado);

• connecting communities of people who care about land and water conservation by providing tools and opportunities for people to share information about and promote their own priorities, and to connect with others interested in those places; and

• increasing overall investments in land protection by showcasing America's natural treasures and their conservation needs through compelling web and print resources offering useful maps, great writing, photography, and video.

At the heart of LandScope America is a website that will provide a state-of-the art online map viewer as well as supporting text and multimedia content.

History: The project was initiated in late 2006.

Current status: A preview website provides a glimpse of the type of features and information that will be found on the full website, which will be launched in late 2008. Although the site will have nationwide coverage, five states — Colorado, Florida, Maine, Virginia, and Washington—are serving as pilots. The state-specific subsites (e.g., LandScope Colorado) will make available a richer and more detailed level of local coverage.

Next steps: LandScope America is now preparing the full website for its late-2008 launch. Over the next several months developers will be refining the overall site design and testing the web-based map viewer. Although certain information will be available for all states at launch, in 2009 and beyond the program will focus on expanding the LandScope partnership to create additional state subsites that offer more detailed local information.



NatureServe Forest Program

http://www.natureserve.org/explorer

Manager: NatureServe, based on data exchanged with member natural heritage programs in the United States, Canada, and Latin America.

Primary funders: Government, foundations, private sector.

Scope: Western Hemisphere.

NatureServe Forest Program continued

Mission: To provide the scientific basis for effective conservation action and be the leading source of information about rare and endangered species and threatened ecosystems.

Activities: NatureServe seeks to make biodiversity a mainstream consideration in forest management and conservation decisions by giving landowners, forest managers, conservationists, and others access to highquality biodiversity information. It advances scientific resources and information technology systems to meet the needs of clients and partners. It also works to strengthen organizational effectiveness and capacity and better leverage the power of the NatureServe network to inform conservation and sustainable forestry at local, regional, national, and international scales.

The NatureServe Forest Program works to support sustainable forestry practices by providing biodiversity information, tools, and management guidance to those involved in public and private forestland management. In addition, NatureServe data are used in prioritizing lands for potential protection (e.g., through working forest easements) and for long-term ecological monitoring.

History: NatureServe carries on a legacy that began when The Nature Conservancy helped establish the first state natural heritage program in 1974. Today, the NatureServe network includes 80 independent conservation data centers throughout the Western Hemisphere, with some 1,000 dedicated scientists. In 2001, The Nature Conservancy, which had provided scientific and technical support, transferred this role to NatureServe, along with professional staff, databases, and responsibility for the scientific standards and procedures under which the network operates.

Current status: Considerations for NatureServe data have been incorporated into three forest certification systems — the Forest Stewardship Council, the American Tree Farm System, and the Sustainable Forestry Initiative. The NatureServe Forest Program is pursing two concurrent pathways to assist the forest sector: (1) improved web-based data delivery tools (see below), and (2) enhanced outreach materials for loggers and landowners.

Next steps: Further coordination is needed to continue to improve the consistency and availability of information on conservation lands from state member programs. NatureServe is working with partners in the forest products sector to publish and distribute brochures designed to increase awareness about critical habitat types for biodiversity in state forestry training

programs and to aid procurement foresters, extension agents, and others.

NatureServe would like to provide guidance and coordination to member programs and partners involved in biodiversity monitoring on forest easements. Services might include data systems for managing field observations, monitoring methods, ecological integrity assessments, and mapping techniques.



Gap Analysis Program (GAP)

http://gapanalysis.nbii.gov

Manager: U.S. Geological Survey via the National Biological Information Infrastructure program.

Primary funder: U.S. Geological Survey. *Scope:* National, regional, and state.

Mission: To provide regional assessments of the conservation status of native vertebrate species and natural land cover types and to facilitate the application of this information to land management activities.

Activities: The Gap Analysis Program seeks to keep common species common by identifying those species and plant communities that are not adequately represented in existing conservation lands. Common species are those not currently threatened with extinction. By identifying their habitats, GAP gives land managers and policy makers the information they need to make better-informed decisions when identifying priority areas for conservation.

To carry out its mission, GAP has five objectives:

- mapping the land cover of the United States;
- mapping predicted distributions of vertebrate species for the United States;

• documenting the representation of vertebrate species and land cover types in areas managed for the long-term maintenance of biodiversity;

Gap Analysis Program (GAP) continued

providing this information to the public and those entities charged with land-use research, policy, planning, and management; and
building institutional cooperation in the application of this information to state and regional management activities.

History: The program began in 1989.

Current status: GAP completed work on the Southwest in 2006 and the Southeast in 2007; work in the Northwest is in progress; activities in the Northeast and Midwest are just beginning.

Next steps: National coverage will be developed following completion of the regional projects.



Conservation Almanac

www.conservationalmanac.org Manager: Trust for Public Land. Primary funder: The William and Flora Hewlett Foundation.

Scope: Land conservation activity from 1998 to 2003 in the U.S. West (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming). Current efforts are national.

Mission: To serve as the comprehensive source of information on the status of land conservation.

Activities: The Trust for Public Land conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come. Its Conservation Almanac provides a comprehensive, online source of information on the status of land conservation. It counts the total land that has been conserved for each state, compiled through the best available data from state and federal agencies, as well as a listing of LandVote conservation finance ballot measures. It analyzes land conservation activities by compiling baseline acreage and cost of land conservation data, detailing land conservation activities and growth trends in recent years, and summarizing policies and programs that underpin land conservation in each state.

The Conservation Almanac provides conservation land acquisition information about the western region overall and information on each of the 13 western states as of 2003, with the exception of California (because of uncertainties about data accuracy). The almanac provides a summary of total land that has been conserved in each state (except California) compiled from the best available data from state and federal agencies.

At the individual state level (except California), the almanac includes (1) acres conserved as of December 31, 2003; (2) land conservation activity, both acres acquired (fee title and conservation easement) and dollars spent from 1998 through 2003; (3) a detailed listing of LandVote conservation finance ballot measures; (4) a profile of the state's land conservation programs; and (5) a discussion of the state's policy framework that underpins land conservation. Finally, the almanac includes a data analysis tool enabling the user to examine the underlying data and generate custom reports for individual or multiple states.

The almanac lists state achievements in land conservation by state park, natural resource, and other relevant state agencies as well as federal achievements in land conservation.

History: The Conservation Almanac project grew out of the many requests The Trust for Public Land received for data to understand the context for land conservation and the growing conservation finance movement.

Current status: Current data cover land conservation activity from 1998 to 2003, but an updated dataset, scheduled to be released in 2008, will introduce the new almanac, which will include all 50 states.

Next steps: Future iterations will seek to include local government and private or nonprofit acquisition and spending data. One current project involving various partners is compiling data and mapping components related to community forestry across the country; this project is funded by the U.S. Endowment for Forestry and Communities.



Protected Areas Database (PAD)

www.consbio.org

Manager: Conservation Biology Institute (CBI). Primary funders: U.S. Forest Service, U.S. Geological Survey, Moriah Fund, World Wildlife Fund. Scope: National.

Mission: To provide scientific expertise to support the conservation and recovery of biological diversity in its natural state through applied research, education, planning, and community service.

Activities: CBI is creating a database that allows any user to know exactly what open lands are protected anywhere in the United States and to easily connect this inventory to conservation and other land assessment systems. This next-generation inventory will support better conservation assessment, more effective regional and project planning and stewardship, improved public access to recreation, and more efficient accounting for public investment. The latest update gives the boundaries of most protected areas owned or managed by federal or state governments in the coterminous United States and Alaska, and it includes county, city, and private reserves when data are available. Additionally, the database contains information about parcel type, ownership, size, and protection level.

History: The project began in 1998. The original Protected Areas Database (PAD) was the result of a collaborative effort between the Conservation Biology Institute and the <u>World Wildlife Fund U.S</u>. The database was developed as a geographic information system (GIS) dataset representing protected areas in the contiguous United States, Alaska, and Canada; their associated protection levels are presented as <u>Gap</u> <u>Analysis Program (GAP)</u> codes.

Current status: CBI is currently working on version 5 of the PAD while planning for the future of this important database.

Next steps: A new product will be called the Protected Areas Database U.S. (PADUS). The first step is a one-year design process in 2008 supported by funding from the Doris Duke Foundation and the

U.S. Geological Survey. Teams of experts are preparing analyses and recommendations on the best approach to creating PADUS, including business strategies for maintaining the data inventory over time.



Conservation Registry

<u>www.conservationregistry.org</u> (background, development updates)

<u>http://beta.conservationregistry.org</u> (passwordprotected prototype)

Manager: Defenders of Wildlife.

Primary funders: Doris Duke Charitable Foundation, U.S. Fish and Wildlife Service, U.S. Forest Service, Oregon Department of Fish and Wildlife, Oregon Department of Transportation, Washington Department of Fish and Wildlife, Idaho Fish and Game, Oregon Forest Resources Institute. Other contributing organizations and individuals are listed on the registry's website.

Scope: National.

Mission: To provide a centralized location for tracking conservation projects that extend across political and state jurisdictions.

Activities: The registry is a user-friendly database with mapping capabilities that catalogs and displays information on conservation projects across the landscape. The intent is to facilitate more strategic conservation investments and address issues associated with landscape scale and ecological context. The registry will serve as a synthesis tool to integrate information from multiple sources and as a project management tool for individuals, agencies, and organizations that do not have the capacity to develop their own.

History: Defenders of Wildlife and partners

Conservation Registry continued

initiated development of the registry to facilitate efficient reporting of accomplishments associated with state wildlife action plans.

Current status: The registry recently completed a beta testing period, and a planned pilot release for Oregon, Washington, and Idaho is scheduled for summer 2008; national expansion is expected to follow soon thereafter. The registry will also integrate with and link to complementary efforts, such as LandScope America.

Next steps: Following the beta testing and feature refinement, data on conservation projects will be solicited from relevant organizations and agencies.



Forest Legacy Program

http://www.fs.fed.us/spf/coop/programs/loa/flp.shtml Manager: U.S. Forest Service. Primary funder: U.S. Department of Agriculture. Scope: Private lands nationwide.

Mission: To protect environmentally important private forests across the nation and promote the sustainable forest management of those working lands to provide benefits to people and society.

Activities: The Forest Legacy Program (FLP) provides financial incentives to willing private landowners to prevent forest conversion and fragmentation. Its goals and objectives are accomplished through Forest Service cooperation with state partners, federal agencies, local units of government, forest landowners, and other partners. FLP identifies and protects environmentally important private forestlands that are threatened by conversion to nonforest uses and provides the opportunity for continuation of traditional

forest uses, such as forest management and outdoor recreation. The purpose of the program is to maintain resource and timber-based economies, provide public recreation, protect important fish and wildlife habitat, and improve water quality through forest protection.

History: FLP was established in 1990. The Secretary of Agriculture is authorized to acquire lands and interests in lands in perpetuity for inclusion in the program. Landowner participation, including the sale of lands and interests in lands, is entirely voluntary.

Current status: As of 2008, the program had protected more than 1.5 million acres of working forests across 36 states and Puerto Rico. It has experienced solid growth in its budget and now has 45 participating states, with an additional four states in the "assessment of need" planning process.

Next steps: A five-year strategic plan has been developed to provide direction for FLP to improve accountability and performance. The guiding principles project includes plans to conserve private forests that provide environmental and economic benefits to people and communities and slow the conversion and parcelization of private forests.



Natural Resources Conservation Service Programs

http://www.nrcs.usda.gov/programs/

Manager: Natural Resources Conservation Service (NRCS).

Funder: U.S. Department of Agriculture.

Mission: To help reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Public benefits include enhanced natural resources that help sustain agricultural productivity and environmental quality while supporting continued economic development, recreation, and scenic beauty.

Activities: NRCS currently has responsibility for

Natural Resources Conservation Service Programs *continued*

monitoring, managing, and conducting enforcement activities on approximately 11,000 conservation easements covering more than 2 million acres. The area covered is projected to increase by approximately 250,000 acres annually. NRCS administers three easement programs.

Wetlands Reserve Program (WRP). This voluntary program offers landowners technical and financial assistance to protect, restore, and enhance wetlands on their property. The goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. The program offers landowners an opportunity to establish either permanent or 30-year conservation easements.

Farm and Ranch Lands Protection Program (FRPP). This program provides matching funds to help purchase development rights to keep productive farmland and ranchland in agricultural uses. Working through existing programs, USDA partners with state, tribal, and local governments and nongovernmental organizations to acquire conservation easements or other interests in land from the landowners. All easements in this program are perpetual.

Grassland Reserve Program (GRP). This voluntary program provides farmers and ranchers the opportunity to protect, restore, and enhance grasslands, rangelands, pasturelands, shrublands, and related lands through perpetual and 30-year conservation easements. The program is jointly implemented by NRCS and the Farm Service Agency. It emphasizes support for working grazing operations, enhancement of plant and animal biodiversity, and protection of grassland and land containing shrubs and forbs under threat of conversion to cropping, urban development, and other activities.

Current status: NRCS is currently working to digitize all Wetland Reserve Program easement boundaries. Approximately 4,000 easements were flown in 2007 and 7,000 will be flown in 2008.

Next steps: The agency plans to procure aerial photography on all Wetland Reserve Program easements in 2009 to aid in monitoring activities (which will still be conducted on site at least every three years). NRCS is working to ensure that its conservation easements are properly monitored, managed, and enforced to protect the functions and values for which these easements were purchased, to maximize the benefits of its conservation easement programs, and to maximize benefits to wildlife and wildlife habitat.



Land Trust Alliance Census

http://www.lta.org/aboutus/census.shtml Manager: Land Trust Alliance (LTA). Primary Funder: Land Trust Alliance. Scope: National.

Mission: To provide a statistical picture of the number of land trusts operating in the United States, along with the amount of acres conserved by state, and other data related to the strength of the land trust community.

Activities: The Land Trust Alliance works to save the places people love by accelerating the pace of conservation so that more land and natural resources are protected. It also seeks to improve the quality of conservation so that the most important lands get protected using the best practices in the business. And it strives to ensure the permanence of conservation by creating the laws and resources needed to defend protected land over time. The census is intended to help land trust professionals and policy makers assess the effectiveness of private, voluntary means of conservation. Among the items surveyed:

- number of acres privately conserved, at both the state and national levels;
- types of conservation tools employed by local land trusts and landowners;
- types of land targeted for conservation;
- regional growth patterns in private land conservation; and
- human and fiscal resources of land trusts operating in the United States.

History: Inventories of the land trust community started in 1982. The Land Trust Alliance Census documents the pace, volume, and type of private land conservation occurring in the United States, along with measures of organizational development.

Current status: The last census was the 2005 National Land Trust Census, published in 2006.

Next steps: LTA is shifting to an annual census schedule, starting in 2008. The annual censuses, reporting on the macro indicators of the effect of private land conservation, will be supplemented by more indepth censuses every five years. The next such effort will be the 2010 National Land Trust Census, to be published in 2011.

COMPARISON OF CURRENT PROGRAMS

Overview of six conservation data programs that make information publicly available.

Program	Focus	Technology Platform	Mapping Capability	Status
LandScope America www.landscope.org Sponsor: NatureServe and National Geographic Society Contact: Bruce Stein bruce_stein@natureserve.org	National; priority areas for conservation, conservation estate, critical ecological features.	Various; accessed through commonly available web browsers.	Dynamic maps based on ESRI technology.	Preview site now available; full site scheduled for release in late 2008.
NatureServe Forest Program www.natureserve.org/explorer Sponsor: NatureServe Contact: Bruce Stein bruce_stein@natureserve.org	Western Hemisphere; biodiversity of various ecosystems, focus on endangered species.	Information managed in NatureServe's custom data management system, Biotics; Oracle and ESRI GIS products.	Maps include field observations, population data, species range maps, ecological systems, vegetation communities.	Efforts focused on web-based data delivery.
Gap Analysis Program (GAP) http://gapanalysis.nbii.gov Sponsor: U.S. Geological Survey Contact: Kevin Gergely gergely@usgs.gov	National, regional, state; vegetative cover types, predictive maps for species presence.	Web Portal with interactive online mapping, FTP, CD.	ArcINFO/ArcGIS, ERDAS Imagine, eCognition.	SW completed in 2006, SE completed in 2007, NW in progress (2008), NE and MW just beginning.
Conservation Almanac www.conservationalmanac.org Sponsor: Trust for Public Land Contact: Andrew du Moulin andrew.dumoulin@tpl.org	National; land conservation activities and growth trends, related policies and programs.	Apache, written in CGI/ Perl; advanced javascript.	Google Maps, GIS capabilities, Quickbase database service.	Update for western states underway; national data scheduled for release in 2008.
Protected Areas Database (PAD) http://consbio.org/cbi/projects/PAD/index.htm Sponsor: Conservation Biology Institute Contact: Jim Strittholt stritt@consbio.org	National; protected areas, management areas.	GEODatabase, data available in CD form, possible hosting from ESRI.	GIS data sets through GAP.	Version 5 of PAD underway; next generation of database to be released is PADUS.
Conservation Registry www.conservationregistry.org Sponsor: Defenders of Wildlife Contact: Jeff Lerner jlerner@defenders.org	National; scale and scope of conservation from multiple sources across landscape.	Server OS: FreeBSD 6.2. Database: PostgreSQL/ PostGIS. App. platform: Ruby language, Ruby on Rails MVC frameword, UM Mapserve.	Google Maps.	Oregon, Washington, and Idaho pilot scheduled for release in summer 2008; nationwide coverage in development.

Note: Table does not include Forest Legacy Program, National Resource Conservation Service programs, and Land Trust Alliance Census, which differ in the ways they make their data publicly available.

LEARNINGS FROM THE SESSION

After the overview session, participants entered into a wide-ranging and high-energy discussion about needs, issues, and opportunities. One speaker offered this summary: "We must see what is protected (current state); determine what is important to protect (assessment and planning); and organize efforts to see it protected (secure funds and implement plans)."

Conservation easements should be included in protected area data coverage. All agreed that securing, cataloguing, and maintaining information on conservation easements are especially challenging yet extremely important. Although the number of organizations with interests in conservation easement activity is very large, most conservation easements appear to be held by only a few institutions — the U.S. Forest Service, the Natural Resources Conservation Service, The Nature Conservancy, and a few large regional and state land trusts.

The technology to assist data management exists. Google Maps is likely the best known of all mapping and information technologies, but its potential for analysis and planning by interfacing with GIS and other systems is limited. One speaker suggested that Microsoft offers a far better and more flexible platform.

Complete, on-demand access to easement information is unrealistic. Among the more significant perceived

Learnings from the Session continued

challenges to amassing and managing conservation easement data is the issue of "access versus content." Some landowners do not want information about their easements to be shared publicly, and, in certain cases, there may be liability exposure for releasing it.

Conservation easements are public documents because certain societal interests in a parcel were acquired with public resources — whether by direct payments to landowners using tax dollars (as for Wetlands Reserve Program or Forest Legacy Program easements) or as state or federal tax deductions for landowners who voluntarily cede certain rights and interests in their land. Given that society has entered into a public-private partnership with the landowner to protect certain societal interests, to what extent should such information be made readily available to the general public?

Thus, the issue is one of degree. Perhaps at this stage, on-demand access to detailed information on all conservation easements in a publicly searchable database would raise too many concerns and present too many hurdles. But a system that allowed controlled access by prequalified parties (e.g., public agencies, conservation planners, and others who have either partnered in creating the system or signed nondisclosure agreements) might be more acceptable. There could also be scale limitations that could be applied to reasonably filter the use — that is, users might be prohibited from portraying any information below a certain scale (e.g., 1:250,000). Such limited-access systems might further progress toward a robust "rolled-up" system that would eventually include all information from federal and state agencies as well as land trusts.

NEXT STEPS

Meeting participants agreed that easily accessible, aggregated information about forest conservation easements would improve planning and help all conservation programs prioritize their acquisitions. But what would such a system look like?

Harvard naturalist Edward O. Wilson and a panel of scholars and scientific organizations have initiated the *Encyclopedia of Life* (EOL; www.eol.org), an on-line database with detailed accounts of the estimated 1.8 million known species on the planet. This "wiki" site allows users to suggest additions and offer edits. Is a Programs should collect a certain minimum level of detail on easements. To avoid creating a complex system that cannot be efficiently developed and maintained, agreement on the minimum level of detail is needed. For instance, it is essential to know the term of a conservation easement: Is it in perpetuity or for 30 years? And it is useful to know which rights are part of the public estate: Does the easement preclude development but allow recreational access? Other important rights and interests that affect habitat and biodiversity might include active forest management, farming, and ranching. On the other hand, specifics about the types of management and other more finegrained details, while of interest, would likely not be needed at state or regional planning scales.

The most sustainable approach may be bottom-up, not top-down. In decades past, federal and state agencies were looked to as sources of funds and managers of data for conservation acquisition and planning. With continued reductions in agency budgets, funding responsibility for planning and data management has increasingly fallen to local governments and, in many cases, the not-for-profit sector.

Several participants argued for a "sustainable business model"— a system that could perhaps be maintained by user fees. Others suggested that state governments should be the providers of the service, but one speaker said that such an approach would be upside down: "States and counties should be viewed as the customers for this information" because it is vital to sound planning and the attainment of broad societal objectives. Would such an approach face both institutional and political obstacles?

variation — perhaps a "controlled wiki" — a potential model for collecting information on forest conservation easements and making it widely available?

The U.S. Endowment has invited the Land Trust Alliance, The Nature Conservancy, the Forest Service, the Natural Resources Conservation Service, Ducks Unlimited, and other organizations with a keen interest and significant stake in conservation easements to determine whether a systemic approach to conservation easement information is possible, and, if so, what the system should be and how it should be created.

APPENDIX

Attendees at the February 11, 2008, Meeting

Rob Aldrich, Land Trust Alliance Lisa Audin, Gap Analysis Program Bob Bendick, The Nature Conservancy Frank Biasi, National Geographic Society Jamie Rappaport Clark, Defenders of Wildlife Danielle Conboy, The Nature Conservancy Liz Crane, USDA Natural Resources Conservation Service Andy Cutko, NatureServe Kevin Gergely, Gap Analysis Program Leslie Honey, NatureServe Mary Klein, NatureServe Jeff Lerner, Defenders of Wildlife Tim Male, National Fish and Wildlife Foundation Larry Orman, Greeninfo Network Carlton Owen, U.S. Endowment for Forestry and Communities Nancy Parachini, U.S. Forest Service Larry Selzer, The Conservation Fund Nicole Shaffer, NatureServe Diane Snyder, U.S. Endowment for Forestry and Communities Peter Stangel, National Fish and Wildlife Foundation Bruce Stein, NatureServe Jim Strittholt, Conservation Biology Institute

Observers

Joe Bond, NatureServe Lori Scott, NatureServe Rob Solomon, NatureServe Rickie White, NatureServe

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