National Ecosystem Services Partnership Kickoff Meeting held October 1-2, 2009 National Geographic Society, Washington DC (Report completed 10/28/09)

This document is not all inclusive but attempts to cover key points of discussion. We (EPA and Duke) took the liberty of taking "Research" out of the partnership name for now given this suggestion at the meeting.

Meeting Purpose

To explore the potential and interest for developing partnerships among and between a diverse range of organizations, federal and state agencies, universities, and businesses to improve understanding and applications of ecosystem services to decision-making.

Participants

Over 160 individuals and organizations expressed interest in the National Ecosystem Services Partnership (NESP), including State agencies that administer natural resource and conservation programs, regional planning councils, academia, professional science organizations, nongovernmental conservation organizations, businesses, and Federal agencies. Collectively, this represents an immense talent pool that bodes well for the success of the NESP, but its sheer magnitude posed logistical problems for initiating discussions.

EPA selected about 35 institutions, representing a variety of organizational types, to attend the initial meeting in DC to kick-off partnership discussion and activities. This was done to facilitate discussion. We based the selection upon our assessment of the organization's breadth of experience, relevant expertise, potential to contribute to unmet needs of the NESP, and potential to define, test, and use the products of its work. Please note that organizations not invited to this kick-off meeting are not excluded from future participation and will receive a meeting summary report and will have opportunities to engage in partnership activities as they evolve.

The list of participating individuals and organizations can be found at the end of this document.

For those who do not have time to read this full document, participants had a rich and fruitful discussion, concluded that there is value in pursuing the development of this partnership, indicated that federal agencies are a key ingredient to its success and many are willing to help work out the details.

Introductory Remarks by National Geographic Society Hosts

John Francis, National Geographic Society, Vice President for Research, Conservation, and Exploration

Since 1890 the National Geographic Society's Committee for Research and Exploration (CRE) has supported more than 8,300 projects and expeditions—including the excavation of Machu Picchu, the discovery of *Titanic*, and the work of Jane Goodall, Dian Fossey, and the Leakey family.

Over the last 117 years, the CRE has given more than 170 million dollars in research grants worldwide. Beginning in 1890 with a \$3,500 grant that sent Israel Russell into the Yukon Territory to map and study the Mount Saint Elias region, National Geographic has gone on to support everything from primate research to Lepidoptera collection, from measuring the height of Mount Everest to assessing the biological diversity of the deep ocean.

The CRE's primary objective is to support field-based scientific research around the world, within the context of National Geographic's mission of "inspiring people to care about the planet." This encompasses, but is not limited to, an emphasis on multidisciplinary projects addressing environmental issues (http://www.nationalgeographic.com/field/grants-programs/cre.html).

National Geographic through its magazine, television and films reaches an audience of over 300 million people each month, a fantastic opportunity to increase peoples' awareness of ecosystem services, sustainability, and good stewardship for our planet.

John then introduced National Geographic staff present in the room- writers, production people, and others.

Introductory and Context Setting Remarks by Rick Linthurst of EPA

Rick Linthurst, National Program Director, Ecosystem Services Research Program, US EPA, Office of Research and Development

The Millennium Ecosystem Assessment (MEA) was my introduction to the topic of ecosystem services and it has significantly guided our thoughts for research in the EPA Ecosystem Services Research Program

Our EPA centric thought (from a research perspective) was, we will not protect our ecosystem services until we account for their full value as concluded in the MEA. It also suggested that we have a huge opportunity to move this concept into the environmental management decision making at all scales as a complement to the current regulations.

It became clear that this was not just a natural science issue but one that should involve social scientists, economists, decision sciences, law and others including ecologists. As a group of ecologists, left to our own reasoning, we would likely do some really great research that would not address delivery of services in a valuation environment. Within EPA we have seen this problem repeatedly when the regulatory process cannot adequately address ecosystem damage. Large informative reports go unconverted to benefits other than as honorable mention, quite unlike the human health analyses.

Realizing this gap in our talent base, we immediately looked for partners, many of whom are in this room, who were ahead of us and had the talent base we did not possess. However, there was something else that seemed missing and worthy of an investment.

The idea that was most attractive to us was "could we advance the science and speed the adoption of the concept more quickly if we could have an "institute" that could truly bridge the gap between all these disciplines"? The first thought was to fund a virtual institute with all the right talent and challenge them to move it all forward.

We recognized that in the past such efforts were often fleeting and there might be a better approach. Looking around at all the ongoing work by many of you, there seemed to be an alternative approach that brings us all together today. That approach was to bring all this talent together, and ask: since we are all interested in advancing this concept and learning more about all aspects of it, and since we all have different strengths to bring to the table, and since none of us can best go it alone, for resource reasons alone, could we develop an organization, association, alliance, institute...or some yet to be defined coalition that will add value to what we are doing; help us move the concept forward in parallel rather than as is often done in series, science, policy, and law within a common framework championed by this community that serves as a common marketing tool for resource commitments to either the coalition of individual participants.

I need to make clear at this point is that we were thinking as a member of this coalition, not an owner. We believe the appropriate community, of which you are all a part, should describe what this group or partnership or coalition is and that we as EPA, and our Program in particular, would decide to participate, as will you, within that consensus description. This should NOT to be perceived as anything EPA, but rather whatever you collectively believe and decide it should be. We would like an opportunity to join, however, and for now, are willing to invest in facilitating the idea's advancement until it seems it can move forward under its own momentum or we all decide it is best left behind. Some things we thought about that such a coalition could address would include:

- Indicators and protocols that support environmental accounting systems and markets
- Improve the ability to do assessments and valuation
- Explore institutional capability for investments in natural capital

These are some general thoughts that I hope will start to stimulate ideas and discussions to support the concept in the future. We (EPA) are but one voice in a crowd of exceptionally knowledgeable people.

My one hope is that we can make significant progress on what such a coalition can and should do, and what such an organization, coalition, association.....should look and operate as. These are the foundations of what I often referred to as a "prospectus" that we can each use to champion our own and collective causes with those who have the resources that can help us transform the way decisions are made at all scales to more fully account for nature's benefits.

My personal vision for this coalition is a place where unbiased information about ecosystem services and markets could be found, where 30 million plus dollars annually would provide for filling gaps consistent with the mission, along with the sweat equity that could be provided by all our organizations as contributors to the coalition.

Introductory Remarks to Initiate Group Discussion by Iris Goodman of EPA

Iris Goodman, Deputy Director, Ecosystem Services Research Program, US EPA, Office of Research and Development

Rick Linthurst has shared his vision of what this group, coalition, or partnership might evolve into. I would like to reiterate that EPA is merely one entity at the table and everyone at the table has a voice. Rick has proposed the "why"; I will introduce an approach to the "how".

Looking around the table I see a great deal of talent and ability in all aspects of ecosystem services. This begs the question "what can we accomplish together, that we cannot accomplish individually?" This introduces the challenges for breakout groups over the next two days, namely

- What can a National ESRP accomplish together, and what are the potential "value added" products and activities
- What would a National ESRP look like? What process shall we use to create and document this partnership structure?

In our deliberations, we must speak honestly and transparently regarding potential sensitive issues, "dealbreakers" or things or behaviors that might impede the progress of our coalition. What are neutral domains, and what are roles for participants? We have suggested a very multidisciplinary composition of the breakout groups. Again these are suggestions, not necessarily assignments. In each break-out group we will have discussions regarding strategic objectives and partnership principles, and how to move forward. What will we collectively describe as our mission, what are our goals and objectives, and what structure will we adopt to reach those goals and objectives (realizing that each of our organizations may have limits to what each of us can commit to)? Our real strength is in our diversity – let's use that in our breakouts.

The following sections are summaries of brainstorming sessions and break out groups.

First Break-Out: Brainstorming Strategic Objectives and Principles for a Partnership

Purpose: To identify where the NESP can add value. Describe what the NESP could accomplish together that the individual organizations cannot accomplish alone. The break out group task was to develop the elements of the mission for the NESP and some approaches or tasks for achieving this mission.

<u>What NESP should be</u> – NESP should be a multi-stakeholder partnership that includes key government agencies and should include a range of other expertise and institutions: scientist, policy makers at all levels, corporate decision makers, environmental, municipal, agricultural and other relevant organizations. These types of institutions would also be the audience for the outcomes. The public, particularly land owners, would also be a targeted audience.

NESP may initially be domestically focused given the involvement of US government agencies, but it should look to international efforts and examples and link to international networks and partnerships. Becoming an international partnership should be up for discussion.

Note of clarification: This is not an environmental markets only group. Markets were seen as only one tool for incorporating ecosystem services into decisions, and thus are only one of many outcomes/users that the partnership should consider.

What NESP could do – The elements of the mission statement for the NESP were:

- Facilitate the development and dissemination of knowledge for protecting, enhancing, and restoring ecosystem services (or the value of nature) for human health and well being; develop a more sustainable dependence
- Enhance capacity for incorporating ecosystem services into decision making
- Achieve efficiencies
- Provide credibility and transparency, become authoritative body?
- Use a systems approach; optimize services
- Bring science to bear to inform decisions
- Provide relevant and timely information

Actions for achieving such a mission could include <u>Communicate</u>, <u>Consensus</u>, <u>Catalyze</u>,... The partnership would not lobby.

The partnership needs a compelling vision.

<u>Possible added value tasks the NESP could undertake</u> were focused around two different audiences. The first is the community of experts, agencies, and organizations that are engaged in ecosystem services research or those incorporating services into their decision making (governments, corporations). The body of work and tasks suggested as added value to this community in the break-out sessions we are terming "inreach". The second audience includes the general public, land owners and yet to be engaged decision makers in governments and corporations. These tasks were focused on "outreach" to the unengaged.

"Inreach" related tasks:

- Serve as a resource and repository for bringing science to bear to inform decisions
- Synthesize existing science, tools, policy approaches etc...
- Gaps and needs assessments
- Coalesce around regions; place based efforts (keeping in mind that 50% of US population resides in urban areas)
- Disseminate science and tools
- Create "best practices" guidance for measuring and assessing services; develop standardized, interoperable methods for measuring and assessing ecosystem services; including the development of tools.
- Identify and communicate case studies
- Initiate experimental approach to prototype best practices; develop template for case studies to support meta-analysis; demo new business models, policies or financing.
- Convene or provide forum for linking ES communities
- Coalesce around existing partnerships
- Facilitate multi-directional integration among stakeholders; improve use of desired ecosystem services outcomes based on input from users to inform research agenda; connect to opportunities within existing institutions existing laws, policies and boundaries; science for society framework.

- Create a place where projects can find experts
- Catalyze innovation; align incentives

"Outreach" related tasks:

- Curriculum for students, involve students in NESP work
- Develop on-line courses
- Engagement of end-users (noted above) will also educate decision makers
- Consider terms "ecosystem services" not understood by general public vs. term such as "nature's values".
- Communicate case studies or demonstration projects
- Products should be useful, palatable, and practical for end users like land owners

Remaining question for NESP: Does the partnership fund research? Or just its component parts/partners? Does it advise on future research directions?

The breakout groups highlighted the following barriers that the partnership could help address; limited funding, fragmented information and access to information, incomplete or ineffective linkages between end users and science, and limited public understanding.

Second Break-Out: Creating and Structuring a Partnership

Purpose: To identify options and approaches (business models) for structuring a partnership that creates the value added discussed earlier.

<u>Consider phases</u> – The NESP may want to consider breaking down what it hopes to achieve into phases that would help define the necessary structure for a partnership over time.

<u>Federal agency engagement</u> – Meeting participants expressed a strong desire that a number of government agencies ultimately be part of the partnership. EPA needs to and will play an interim role providing initial staffing and effort to form the partnership, which may be followed by an interim management structure, before the partnership is fully formed. Other agencies noted on-going or future efforts that overlap with many of the activities proposed in the first break-out discussion. The USDA participant highlighted their new role as established by the most recent farm bill to establish guidelines ... for use in developing ... (1) a procedure to measure environmental services benefits, (2) a protocol to report environmental services benefits, and (3) a registry to collect regard and maintain the benefits measured (paraphrased from sec 1245 of Food Conservation and Energy Act of 2008). Thus any gathering of information and assessment of best practices would help inform their efforts to establish guidelines. Organizers for A Conference on Ecosystem Services (ACES) which included USDA and USGS (Department of Interior) noted their intent to continue that effort and link it to the Community of Practice activities which involve other parts of USDA.

Note: Participants would like to see an assessment of what other partnerships, networks, or other similar or overlapping efforts within and outside government exist to help inform NESP strategy.

<u>Structural models and components</u> - Various structures and components of structures for the NESP were discussed along with example organizations that may provide guidance on how different models of organizational structure have worked.

Structural components

- High level advisory board to help with funding, clout, outreach, setting themes, and raising visibility. (Former Secretaries or Administrators of government agencies, University presidents, Current or former Corporate CEOs or VPs, Presidents of major NGO, current or former Congressional leader, current or former Governor)
- Steering committee made up of partners that weigh in on how to accomplish various tasks; perhaps steering committees or working groups for each task
- Secretariat or partnership staff that facilitates and coordinates
- Regional working groups/networks/communities of practice to better link to users (DOT, Companies, land trusts, NRCS, county commissioners, Corp of Engineers etc...) and develop needs assessments and outreach
- Will need funding to support base operations and convening.
- End users need to be in partnership and inform activities of the partnership.
- Need to have clear leadership
- Guiding principles and guidance for how the partnership would function (governance guidance and bylaws)

Models

- Many raised the idea of a working group model like the National Center for Ecological Analysis and Synthesis (NCEAS) to tackle specific activities and possibly to provide a mechanism to address a broad range of tasks in a flexible manner. <u>http://www.nceas.ucsb.edu/</u>
- Ruckelshaus Institute was proposed as an example of a high level advisory board that provides guidance and vision, and helps with funding, visibility, outreach etc... <u>http://www.uwyo.edu/enr/ienr/</u>
- The Millennium Ecosystem Assessment (MEA was proposed as a model for the synthesis effort, but other participants suggested that this was a tremendously expensive and difficult project that we may not want to duplicate and others suggested we may want a more adaptive and continuous process.
 http://www.millenniumassessment.org/en/index.aspx
- The Intergovernmental Panel on Climate Change (IPCC) was proposed as a synthesis effort that has had
 profound impact and a possible model for the partnerships work on research synthesis and communication
 <u>http://www.ipcc.ch/</u>. (The creation of such a group around ecosystem services has been proposed, The
 Intergovernmental Platform on Biodiversity and Ecosystem Services, which will hopefully be decided upon
 by governments next year.
- Models that involve government agencies that were suggested were the Global Change Research...., the Joint Fire Program... the Rangelands Roundtable, and natural hazards meetings.
- The Long Term Ecological Research (LTER) network was proposed as a model for considering linking regional working groups or communities. <u>http://www.lternet.edu/</u>
- The National Ecological Observatory Network (NEON) was provided as an example of how an independent (non-governmental) secretariat/staff can be developed to work in partnership with Federal Agencies and Universities. It also provides a model for rapid needs assessments. <u>http://www.neoninc.org/</u>
- The Protected Areas Database of the United States coordinates a new protected areas inventory and includes several federal agencies as well as non-profit organizations and state representatives. It is

managed by a steering committee, while a partnership council provides agencies and organizations a means to contribute their expertise. It also includes a technical advisory team. It also provides guidance on best practices. <u>http://www.protectedlands.net/partnership/</u>

- The Consultative Group on Biological Diversity is a grant makers forum to focus attention and coordinate opportunities. It involves foundations and US AID and is a publically supported non-profit organization. http://www.cgbd.org/visitors/aboutcgbd/
- NASA Astrobiology Institute (NAI) is a virtual, distributed organization of competitively-selected teams that
 integrate astrobiology research and training programs in concert with the national and international science
 communities. It has nodes and centralized organization and has agency funding.
 http://astrobiology.nasa.gov/nai/about/
- NASA exploration analysis groups provide an example of working groups that inform government agencies without running into trouble with FACA. MEPAG is NASA's community-based forum designed to provide science input for planning and prioritizing Mars exploration activities for the next several decades. It is chartered by NASA's Lead Scientist for Mars Exploration at NASA HQ, and reports its findings at FACAsanctioned meetings of the Solar System Exploration Sub-Committee of the NASA Space Science Advisory Committee. <u>http://mepag.jpl.nasa.gov/</u>
- National Research Council has standing committees, agency funding, functions under the auspices of the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), and the Institute of Medicine (IOM). The NAS, NAE, IOM, and NRC are part of a private, nonprofit institution that provides science, technology and health policy advice under a congressional charter signed by President Abraham Lincoln that was originally granted to the NAS in 1863. <u>http://sites.nationalacademies.org/NRC/index.htm</u>
- National Electric Code is an international nonprofit membership organization established in 1896 provides and advocates scientifically based consensus codes and standards, research, and education. <u>http://www.necplus.org/pages/default.aspx?sso=0</u>
- The Quicksilver Caucus was formed in May 2001 by a coalition of State environmental association leaders to collaboratively develop holistic approaches for reducing mercury in the environment. It involves government work groups that may be a model for regional working groups proposed in discussion http://www.ecos.org/section/committees/cross_media/quick_silver
- The National Resources Damage Assessment and Restoration Program formed by DOI comprised representatives from federal and state agencies, tribes, corporations, law firms, NGOs and academic institutions who provided recommendations on how to optimize NRDA activities. <u>http://restoration.doi.gov/</u>
- US Climate Change Science Program http://www.ucar.edu/org/about-us.shtml#ucar

In summary, the participants felt NESP needed to develop guiding principles and governance provisions to clarify how the organization makes decisions and speaks publicly. Questions were raised about whether NESP will operate by consensus, and if so how, what will that mean in practice. Also raised was the question about what it means to be a partner. Does everyone have to bring something to the table? Time, effort, resources? How do you become a partner?

Why Create and be part of this Partnership?

Participants posed three critical questions that they would need answered before they and their organizations would fully engage in a partnership. (1) Why is this important? (2) What does it do for us? and (3) How are we going to pay for it?

Participants suggested that synthesis efforts by a credible and accountable authoritative body that linked user and research communities, one that provided best practice guidance, and supported transformative efforts is important and of value to them. They would be willing to engage a partnership if it gave them a more efficient way to access knowledge, high quality knowledge, and high quality participants with which to engage. They also indicated that a needs and gaps assessment would likely help inform public and private financing and could help expand resources needed to move ecosystem service based approaches forward. Funding would be needed to support partnership functioning and actions or activities of the partnership.

If the group is thinking of greater funding from EPA the timeline would be to get into the 2010 budget cycle for funding in 2011 or 2012. In the short term EPA is interested in finding a way to fund some high value assessments to be presented at the 2010 ACES. (Information on the 2008 ACES conference <u>http://www.conference.ifas.ufl.edu/ACES/</u>)

Participants felt it was important that end-users are co-creators of this partnership and suggested that more end-users would need to be invited to join the partnership.

Next Steps

EPA intends to support the continued development of this partnership and open discussions with other agencies regarding possible participation and linking to ongoing activities. It is supporting two part time senior staff Lydia Olander from Duke University and Kathryn Saterson from EPA and two junior staff to focus on the partnership and expects the continued advice and support of many people inside EPA to carry the effort forward.

The partnership will be looking to participants to volunteer time and expertise on a number of issues including reviewing different options for structuring this partnership and options for what partnership in NESP might involve (what the partner would give and receive).

National Ecosystem Services Research Partnership Kick-off Meeting Agenda October 1-2, 2009

Hubbard Hall Board Room National Geographic Society 1146 16th Street, N.W. Washington DC 20036

Meeting facilitator: Mark Nechodom, Deputy Director USDA Office of Ecosystem Services and Markets

Thursday, October 1, 2009

8:00-9:00 a.m. Registration and continental breakfast, Hubbard Hall Dining Room and Foyer

9:00-9:15 a.m. Welcoming remarks

- John Francis, National Geographic Society, Vice President for Research, Conservation, and Exploration
- Kevin Teichman, EPA Deputy Assistant Administrator for Science
- 9:15 9:30 a.m. Introduce strategic objectives of NESRP (Rick Linthurst, US EPA National Program Director for Ecology)
 - 1. Establish ecosystem services indicators and measurement protocols that support environmental accounting systems and markets
 - 2. Improve the ability to perform ecosystem services assessments and valuation across institutional, spatial, and temporal scales
 - 3. Explore institutional capability for investments in natural capital that provides sustainable flows of ecosystem services
- 9:30-10:45 a.m. Introductions of NESRP cooperators
- 10:45 11:00 a.m.Establish meeting goals (Iris Goodman, US EPA Deputy National Program
Director for Ecology)
 - 1. Identify potential "value-added" products and activities: what can NESRP accomplish together?
 - 2. Setting bounds for roles of cooperators: what are "neutral" domains? what are sensitive issues?
 - 3. Moving forward: what process shall we use to create and document structure for Partnership?

11:00-12:30 p.m. Facilitated open discussion of NESRP strategic objectives and principles

12:30-1:30 p.m.	Lunch, National Geographic Society Cafeteria	
1:30-1:45 p.m.	Introduction of break-out groups and charge, including responsibility for drafting results of group discussions	
1:45-3:15 p.m.	Break-out groups	
3:15-3.30 p.m.	Break	
3:30-4:00 p.m.	Break-out group reports	
4:00-5:30 p.m.	Facilitated discussion and synthesis of break-out group results	
5:30-5:45 p.m.	Day one wrap-up and stage-setting for Day 2	
5:45-7.30 p.m.	Reception, Hubbard Hall Dining Room and Foyer	

Friday, October 2, 2009

8:00-8:30 a.m.	Registration and continental breakfast, Hubbard Hall Dining Room and Foyer
8:30-8:45 a.m.	Recap of Day 1 highlights and plan for Day 2
8:45-10:15 a.m.	Break-out groups continued
10:15-10:30 a.m.	Break
10:30-12:00 p.m.	Facilitated discussion and synthesis of break-out group results
12:00-1:00 p.m.	Lunch, National Geographic Society Cafeteria
1:00-1:15 p.m.	NESRP Draft Memorandum of Understanding and Framework for Cooperation (Ray Wilhour, US EPA Special Assistant to the National Program Director for Ecology)
1:15-2:00 p.m.	Clarify responsibilities for next steps planning activities
2:00-3:00 p.m.	Review meeting objectives and "bin" and "action" items and conclude formal agenda for kick-off meeting
	 Address unfinished business and contingencies Clarify working group roles and responsibilities Establish frequency and focus of future meetings and discussions
3:00-5:00 p.m.	Optional networking and follow-up discussions

National Ecosystem Services Research Partnership Kick-off Meeting Participants October 1-2, 2009

Hubbard Hall Board Room National Geographic Society 1146 16th Street, N.W. Washington DC 20036

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