

ACES 2014 All-Day Workshop 1
December 8, 2014 | 8:00am-11:30am, 1:00pm-4:30pm

Title: *Methods for Incorporating Ecosystem Services into Planning and Decision-Making*

Description: This workshop will delve into the ecosystem services assessment framework presented in the Federal Resource Management and Ecosystem Services (FRMES) Guidebook. This framework introduces a standardized, but customizable method for incorporating the value of ecosystem services into planning and decision-making processes. Presenters will walk through key components in depth, focusing on the aspects of the assessment that may be different from current planning and decision-making processes such as: engaging stakeholders in prioritizing environmental benefits they receive, linking ecological or biophysical outcomes to social outcomes, and integrating social value to assess trade-offs among alternative management options, which enables the incorporation of ecosystem services into analyses such as cost-benefit analysis. We will use examples from the FRMES project to facilitate understanding of how resource managers can incorporate the framework into their planning and decision-making processes. Prior to the workshop, we will provide background documentation to participants so they can gain some familiarity with the concepts that will be presented. We have also included several exercises in the workshop to allow participants practice applying these concepts. We would like to arrange the space so that participants can work in groups of approximately 8 on these exercises.

Synergistic Activities: A number of events are being proposed for ACES 2014 to introduce the new National Ecosystem Services Partnership Guidebook for Federal Resource Management and Ecosystem Services. Besides this pre-conference workshop, these include two special sessions (one on case examples and one on data and modeling infrastructure for nation-wide ecosystem services application), a plenary talk, and a separate decision makers series planned in partnership with COMPASS to bring federal decision makers together with the experts attending the ACES conference.

Target Audience: This workshop will be beneficial to anyone involved in conducting or considering ecosystem services assessments for planning processes, with examples of particular interest to federal resource managers. These methods can be applied for a range of planning decisions, from choosing management alternatives to selecting alternative sites, or even comparing project options (e.g. floodplain restoration in watershed A versus levee in watershed B).

Proposed Agenda: This workshop will consist of an introduction to the FRMES project and the assessment framework followed by 15 to 30 minute presentations of key methods. Question and answer sessions follow the presentation of each component, with an additional opportunity at the end of the workshop. We have also integrated several small group exercises into this workshop to give participants an opportunity to apply some of the methods presented.

1. *FRMES Introduction and Overview*

Speaker: Lydia Olander
(20 minutes)

Lydia Olander will provide brief background on the FRMES project and its goals.

2. *Assessment Framework*

Speaker: Dean Urban
(20 minute presentation, 10 minutes for Q & A)

Dean Urban will walk through an overview of the ecosystem services assessment framework.

3. *Stakeholder Engagement*

Speaker: Deb Whittall

(20 minute presentation, 20 minutes for Q & A)

A primary difference in the approach of the FRMES framework from current planning processes is engaging stakeholders in a process to prioritize environmental benefits they receive from natural resource management. The public needs to be involved in identifying and prioritizing these benefits throughout the planning process rather than only eliciting feedback at the end. This need for ongoing public engagement aligns well with the new Forest Service planning rule. Deb Whittall will discuss how to effectively engage stakeholders early in the assessment process so we can link ecological outcomes to what people care about.

4. *Incorporating Ecology Using Means-Ends Diagrams*

Speakers: Christy Ihlo and Dean Urban

(30 minute presentation, 40 minute group exercise, 20 minutes for discussion and Q and A)

A key aspect of the framework is the ability to link biophysical outcomes, which are more commonly measured by resource managers, to social outcomes, which are relevant to ecosystem services. Dean Urban and Christy Ihlo will walk through how means-ends diagrams can make those connections more explicit, and also highlight co-benefits and trade-offs in services that might not otherwise be obvious. Participants will also have an opportunity to develop means-ends diagrams through a small-group exercise.

5. *Integrating Social Value Through Metrics Development*

Speaker: Lisa Wainger

(15 minute presentation, 20 minute group exercise, 15 minutes for Q and A)

A number of methods can be used to assign “value” to ecosystem services. Some are more formal, such as economic valuation or multi-criteria decision analysis; others can be less structured. Lisa Wainger will discuss how semi-structured/semi-formal methods can be used to communicate potential benefits when data or other resources limit the application of more formal methods. A group exercise will lead users through steps that they should consider to represent value in ways that resonate with decision-makers and provide the most useful information for evaluating tradeoffs.

6. *Integrating Social Value Through Economic Valuation*

Speaker: Robert J. Johnston

(25 minute presentation, 15 minutes for Q and A)

Assigning monetary values to the benefits of protecting, enhancing, or restoring ecosystems can be an effective way to evaluate tradeoffs of alternative policies and investments (i.e., restoring floodplains vs. building levees) and improve understanding of society’s dependencies on and values for natural systems. Robert Johnston will present guidance for resource managers interested in using economic valuation of ecosystem services to support decision-making.

7. *Integrating Social Value Through Multi-Criteria Decision Analysis*

Speaker: Dean Urban

(30 minute presentation, 20 minutes for group exercise/detailed example, 10 minutes for Q and A)

Although monetary valuation is often used to compare ecosystem services benefits to other societal costs, some services are not easily assigned dollar values, such as the values people place on culturally important places and biodiversity. Dean Urban will present multi-criteria decision analysis methods.

8. *Workshop Wrap-Up*

Moderated by Lydia Olander and Dean Urban
(30 minutes)

As one of the goals of the FRMES project is to develop some training materials for agencies, we would like to take this time to receive feedback on the training in this workshop (what was useful, what needs more clarity, what was missing, and how can we target it for different communities and agencies, etc.). We plan to also elicit feedback through a survey and will open the floor for a final question and answer session.

Workshop Organizer:

Lydia Olander

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Qualifications: After a decade of research on ecological systems, Lydia Olander, spent a year as a AAAS Congressional Fellow in the US Senate, then transitioned to a career focused on integrating scientific and academic knowledge and expertise into the creation of effective solutions to critical environmental challenges. She directs the Ecosystem Services Program at the Nicholas Institute for Environmental Policy Solutions at Duke University and leads the National Ecosystem Services Partnership, a network of federal agencies, academic experts, NGOs, companies and many others interested in fostering improved collaboration, communication and consistency in ecosystem services approaches in the US. She is lead investigator on a Gordon and Betty Moore Foundation grant on Federal Resource Management and Ecosystem Services, which is coordinating a Community of Practice for federal resource management agencies and developing a guidebook on applying ecosystem services to planning and management decisions.

Workshop Point of Contact:

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