



## Overview and Update on the SAB Project on Valuing the Protection of Ecological Systems and Services

- The SAB initiated this project in 2003 to:
  - assess EPA ecological valuation needs,
  - assess the state of the art and science of valuing protection of ecological systems and services ,and
  - identify key areas for improving knowledge, methodologies, practice, and research
- Draft report is an original SAB study

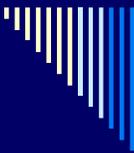
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## To develop the draft report, the committee...

- Held multiple face-to-face meetings to discuss
  - Concept of value and valuation
  - Approaches to valuation
- Conducted interviews with Agency managers and staff involved in ecological valuation for national rulemaking
- Held fact-finding meetings in Regions 5 and 9; drew from an SAB Staff Office survey of regional practices and needs
- Worked on case studies and interacted with EPA staff in program and regional offices

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## The Committee also...

- Led a 2005 SAB workshop involving EPA managers and senior scientists and scientists from other federal agencies, environmental groups, business entities and international organizations
- Provided a 2005 advisory on EPA's draft *Ecological Benefits Assessment Strategic Plan*

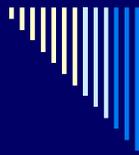
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## Different from other recent reports on ecological valuation

- Focus on *EPA needs* for improved valuation
  - National rulemaking
  - Regional partnerships
  - Site-specific decision-making
- Multi-disciplinary approach to ecological valuation
  - Predicting effects on ecological systems and services
  - Multiple methods for assessing value, appropriate to context
  - Cross-cutting issues associated with uncertainty, communication, and deliberative methods

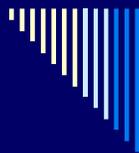
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## What's new in the report: major recommendations (1)

- EPA should cover an expanded range of important ecological effects
  - Analyses should be driven by conceptual models of ecosystems and ecosystem services, not what has worked in the past or available data
- Valuation analyses should involve
  - Interdisciplinary collaboration among physical/biological and social scientists throughout the valuation process
  - Early and appropriate input from public about ecological services

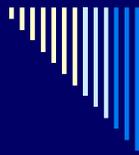
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## What's new in the report: major recommendations (2)

- Importance of enhanced science to identify and develop measures of ecosystem services
  - EPA should seek to use ecological production functions for valuation wherever practical

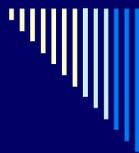
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## What's new in the report: recommendations (3)

- EPA should experiment, where appropriate and valuable, not only with economic valuation methods (the current mainstay of ecological valuation at EPA) but also with other valuation methods (e.g., decision-science methods, citizen juries)
  - EPA should be transparent about the reasons for choosing specific valuation methods and communicate clearly what the methods measure and do not measure

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## To prepare for chartered SAB review in May 2008...

- The draft report received an independent informal review from an economist, ecologist, and social scientist in November 2007
- The committee will provide a lay version of the report to supplement the technical report
- The committee plans to supplement the technical report with detailed web-accessible information on valuation methods

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When you read the report, we would appreciate your thoughts about...

- Communicating the report's findings to EPA and others interested in or affected by ecological valuation
- Research initiatives to address data and information gaps discussed in the report