



SAB/EPEC Review of EPA Ecological Assessment Action Plan

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RAF's Mission & Members

- **Mission:**

To promote ***Agency-wide consensus*** on difficult and controversial risk assessment issues and to ensure that this consensus is incorporated into appropriate Agency risk assessment guidance

- **Members:**

- RAF composed of 30 EPA expert scientists drawn from Program Offices, research laboratories, and Regions
- Selected from nominations from Senior Managers across the Agency



Risk Assessment Forum

Administrator



Science and Technology Policy Council



Risk Assessment Forum

Health Effects

Exposure

Ecological Effects



Technical Panels



Special Subcommittees



RAF Products

- Risk Assessment Guidelines
- Science Policy Recommendations
- Special Reports and Issue Papers
- Agency Colloquia and External Workshop Reports
- **RAF website: www.epa.gov/raf**



RAF Ecological Assessment Action Plan

- Initiated by 2007 SAB report “Advice to EPA on Advancing the Science and Application of Ecological Risk Assessment in Environmental Decision-Making” and 2009 National Research Council report “Science and Decisions: Advancing Risk Assessment”
- Derived from EPA Ecological Risk Assessment ‘s 2009 Colloquium report “Integrating Ecological Assessment and Decision-Making at EPA: A Path Forward”
- Prioritized by RAF Ecological Oversight Committee



Content

- Integrating Ecological Assessment and Decision-making at EPA, RAF Ecological Assessment Action Plan (August 2011)
- EPA report, "Integrating Ecological Assessment and Decision-Making at EPA: A Path Forward - Results of a Colloquium in Response to Science Advisory Board and National Research Council Recommendations" (December, 2010)
- RAF Ecological Risk Assessment Communication Technical Panel Workplan (May 2011)
- RAF Incorporating Ecosystem Services as Assessment Endpoints for Ecological Risk Assessments Technical Panel Workplan (August, 2010) & Generic Ecological Assessment Endpoints (GEAEs) for Ecological Risk Assessment (2003).
- EPA Charge to the SAB EPEC for Ecological Assessment Action Plan



EPA Request

- SAB review of the Agency's ecological assessment action plan and related background documents, and provide advice on the technical merit and implementation of proposed initiatives.



Action Plan

- Science Policy Recommendations
 - *Apply Systems Approaches to Ecological Assessments, and Integrate Different Types of Assessments to Solve Broad Environmental Problems*
 - *Improve Communication of Ecological Assessment Issues and Results [Panel established]*
 - *Incorporate Ecosystem Services and Benefits in Assessment as Methods and Tools Become Available [Panel established]*
 - *Strengthen Science Policies that Promote Agency-Wide Ecological Protection Goals*
 - *Incorporate Adaptive Management as a Formal Science Policy for EPA*
 - *Develop Weight of Evidence as an option for inference in ecological assessments*



SAB EPEC Charge Questions

- #1. Are the initiatives proposed in the Ecological Assessment Action Plan responsive to SAB and NRC recommendations; and do they reflect the most important set of activities needed to address the key scientific and technical challenges for advancing the application of ecological risk assessment in environmental decision-making. Please also consider whether there are other key science policy or technical practice initiatives that should be considered for inclusion in the Plan.
- # 2. Please comment on how guidance for an approach to assessment that integrates different media and endpoints and different types of assessments might contribute to better decision making (e.g., assessment of complex issues, cumulative risk assessment and sustainability analysis).



SAB EPEC Charge Questions

- # 3. Please comment on the scientific merit and limitations of using a weight of evidence approach in decision making and offer any guidance on weighing ecological risk assessment (ERA) lines of evidence.
- # 4. Please comment on whether the RAF's planned project for communication of ecological assessment issues and results to decisionmakers and stakeholders is an appropriate way to proceed, and what obstacles might exist to either interpreting or utilizing ecological information in risk assessment. Please include any observations on why ERA has or has not been well incorporated into decision making in general.



SAB EPEC Charge Questions

- # 5. Please comment on whether the RAF Technical Panel on Ecological Services Assessment Endpoints project captures the full range of opportunities to incorporate ecosystem services into EPA's ecological risk assessment methods through amending the Generic Ecological Assessment Endpoints guidance document.
- #6. Please comment on how use of adaptive management strategies for testing and revising risk management can be developed to provide optimal value for EPA programs.



SAB EPEC Charge Questions

- #7. Please comment on whether there are aspects of ERA science that make the information difficult to communicate, use and process by decision makers. What recommendations does the committee have to strengthen EPA's ecological protection goals? Please comment on how ecological assessment science can be used to strengthen EPA's ecological protection goals.