



**SAB EPEC Review of the
Ecological Assessment Action Plan
February 22, 2012**

***Strengthen Science Policies
that Promote Agency-Wide
Ecological Protection Goals***

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Assessment Colloquium



Background

- Colloquium participants expressed concern that EPA decision- and policy-makers are not well versed in ecological issues and associated ecological protection goals.
- Many emerging environmental issues facing the Agency cannot be addressed within the conventional human health or ecological risk assessment paradigm.
- Broader science policies are necessary for categorizing and contextualizing existing ecological assessments.



Areas for Science Policy Development

- The Colloquium Technical Panel stated that development of Agency-wide science policies in four areas, in particular, would be transformational for ecological assessment at EPA.
 - Apply Systems Approaches to Ecological Assessments
 - Explore Adaptive Management as a Formal Science Policy for EPA
 - Consider Ecosystem Services and Benefits in Assessment Scenarios as Methods and Tools Become Available
 - Integrate Different Types of Assessments to Solve Broad Environmental Problems



Areas for Science Policy Development

1. The Agency's ecological assessors want to be successful but many expressed concern and uncertainty over how to be effective.
2. There is considerable variance across offices within the Agency in the degree of influence of ecological issues.
3. Ecological assessors do not know how to influence policy and are looking to the RAF for leadership and guidance.



Overarching Science Policy Concerns

- Little consensus at EPA on goals for protection of the nonhuman environment or the importance of ecological effects.
- Ecological science principles (e.g., systems analysis, landscape ecology, ecosystem services, and adaptive management) have not been systematically integrated into the Agency's science policy framework.
- EPA must consider ways to elevate representation and influence of ecological scientists as senior science advisors.



Charge Question

- Please comment on whether there are aspects of ERA science that make the information difficult to communicate, or to 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.