

June 3, 2004

NOTES FOR “EXAMPLE EXERCISES” ON
VALUATION OF ECOSYSTEMS AND SERVICES

PURPOSE:

The purpose of the example exercise is to provide a vehicle to help the Committee identify approaches, methods, and data for characterizing the full suite of ecological "values" affected by key types of Agency actions and appropriate assumptions regarding those approaches, methods, and data for the those types of decision.

APPROACH

1. The Committee will use the Agency’s Analysis of the benefits of the CAFO standard as a starting point for the exercise. We have already been briefed on what the Agency did do with these two cases. Our objectives in the exercises will be to:

- evaluate what was done by the Agency;
- consider alternative methods and approaches for assessing the economic benefits of and other values associated with the proposed actions;
- identify alternative approaches to assessment or valuation that might be applied;
- identify data gaps;
- identify best practices relevant to this example and potentially relating to other examples of this type of decision (as they pertain to overarching issues such as: standards for acceptability of data and methods, analysis and characterization of uncertainty; institutional assumptions; assumptions about elasticity and substitutability; transferability; assumptions about the stability of ecological systems; and discounting benefits: and
- identify further research needs in the areas of ecology, economics, and other disciplines.

2. We will break out into two subgroups with a representative mix of disciplines in each group. Assignments will be made prior to the meeting. The Steering Group will name group leaders to lead the discussion and to report back to the Panel as a whole at the end of the day. An SAB staff member will act as a recorder for each group to take notes to be the basis of the report to the Panel as a whole.

Each group should proceed with the following steps:

1. Identify the source and nature of the ecological changes to be evaluated.

2. Identify the ecological resources, systems, and services that are being affected. We expect that each group will identify a broader range of affected ecological services than was actually analyzed by the Agency in its CAFO Report.
3. Identify and describe the range of economic values that are affected by the changes in question, for example, types of recreation activities, amenities, commercially valuable (marketed) commodity production, and so forth.
4. Identify and describe alternative concepts and methodologies that might be applied to the valuation of each of the ecological changes identified above.
5. For the economic values, describe the ecological data/information that must be obtained to adequately characterize the economically valuable results of the policy being evaluated. How does one obtain this information?
6. Similarly, describe the economic data/information that must be obtained to adequately characterize the economically valuable results of the policy being evaluated. How does one obtain this information? Is it time or resource-intensive to obtain?
7. For the alternative valuation concepts, describe the ecological and other data/information that must be obtained to adequately characterize the results of the policy being evaluated. How does one obtain this information? Is it time or resource-intensive to obtain?
8. Discuss the strengths, limitations, and usefulness of the alternative approaches to valuation as applied to this case. Where a particular desired approach is difficult to achieve, are there second-best approaches? To what extent are these second-best approaches biased and/or limited and to what extent are they useful approximations?
9. Identify best practices for this case relating to overarching issues such as: standards for acceptability of data and methods, analysis and characterization of uncertainty; institutional assumptions; assumptions about elasticity and substitutability; transferability; assumptions about the stability of ecological systems; and discounting benefits
10. Identify data gaps and research needs.
11. Should EPA have different purposes or audiences for this benefit assessment than those identified explicitly by the Agency? If EPA had different purposes or audiences for this benefit assessment, would that change the committee's advice for questions 1-10.

SCHEDULE

1. June meeting - devote the second day to breakout sessions for each group and to oral reports and follow-up discussion from each group on what was accomplished during the breakout

session.

2. During the summer, have the two group leaders write up a more detailed report on the results of the two breakout sessions. This report should cover both areas of agreement between to the two groups and any differences in the outcomes of the two groups' work
3. September meeting - Presentation and discussion of the summary report.