



**Roundtable on Sustainable Forests**

*A Partnership for the Future*

**Review Workshop – National Report on  
Sustainable Forests  
Portland, Oregon**

**SUMMARY**

**April 30 – May 2, 2002**

## TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
Chapter 1– Describing and Measuring Sustainable Forest Management.....	10
Chapter 2 – Criteria an Indicators: Data, Analysis and Discussion.....	21
Criterion 1: Conservation of biological diversity.....	21
Criterion 2: Maintenance of productive capacity of forest ecosystems .....	23
Criterion 3: Maintenance of forest ecosystem health and vitality.....	27
Criterion 4: Conservation and maintenance of soil and water resources .....	29
Criterion 5: Maintenance of forest contribution to global carbon cycles.....	31
Criterion 6: Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies .....	33
Criterion 7: Legal, institutional and economic framework for forest conservation and sustainable management.....	38
Chapter 3 – Current Actions in the United States.....	46
Chapter 4 – Interpreting the Information .....	55
Chapter 5 – Future Plans .....	65

## **EXECUTIVE SUMMARY**

### **Introduction**

This is an executive summary of the discussions that took place at the Review Workshop on the National Report on Sustainable Forests in Portland, OR on April 30 – May 2, 2002. The summary is based on input from multiple concurrent breakout sessions in which each of the chapters was discussed. The executive summary does not reflect a comprehensive listing of all of the highlights from each of the individual breakout sessions, but rather provides an indication of some of the highlights from the discussions as well as the breadth of input received from the breakout sessions.

### **Chapter 1 – Describing and Measuring Sustainable Forest Management**

- Several groups thought the purpose of the report is not clear, nor is the primary intended audience. If it really is intended for the general public it misses the mark and is not readable or accessible. Why is the report important?
- A number of groups thought the discussion of the definition of sustainability was not clear in the sense that it did not adequately stress the primacy of the definition that gives equal emphasis to all three pillars of sustainability.
- Not all groups talked about the need for an executive summary but the ones that did clearly thought there should be an executive summary and that once it was produced it might affect the content of the introduction.
- The chapter needs to explain that the primary application of the C&I are national but the report will include sub-national trends and conditions where necessary and appropriate in order to paint a true picture / tell a true story.
- Some groups felt that the history section was good and were positive about it, others thought it should be expanded or be part of appendix.
- Those that felt the history section should be expanded felt that there is a need to include other time periods such as a history of how forests have evolved from:
  - The earliest time of human settlement to the period of European settlement;
  - European settlement to the 1960's and 70's (i.e., start of the modern regulatory regime); and
  - From the 1960 to 70's forward.
- Other suggestions for the history section include:
  - A description of how the C&I came to be and how they might be changed in the future;
  - Using the three pillars of sustainability as an organizing framework for the history section; and
  - Describing the history of sustainable forest management.
- Some groups felt that it would be impossible for this report to be value neutral.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Chapter 2 – Criteria and Indicators: Data, Analysis, and Discussion**

***Criterion 1 – Conservation of Biological Diversity***

- In general, the tone of the summary should be more neutral. The summary should include more information on the key characteristics about the indicators, and provide more explicit information about the linkages between indicators within Criterion 1 as well as with other Criteria. For example, it was felt that indicators 1 & 2 are fundamental to the other indicators within the Criterion and with indicators in other Criteria.
- For the indicators on Ecosystem Diversity:
  - Indicator 2 – Extent of Area by Forest Type and by Age Class or Successional Stage
    - Some participants suggested that a classification of early growth should be developed that integrates more realistic information on the shorter life span of this age category to more accurately reflect its impact on future forest growth and maturation.
    - More age classes should be added and the age range used to classify older growth should be reevaluated and possibly increased.
    - Additional information should be included for a fuller explanation on what is meant by ‘no age data’ as well as how ‘all aged forests’ are dealt with.
  - Indicator 5 - Fragmentation of Forest Types
    - There is a need to clarify what is meant by forest fragmentation. Some felt the term should include a measure of ‘core area’. The term should incorporate the impact of roads while others considered ownership to be a critical factor. As well, because aquatic life is an integral part of a forest, it also should be addressed as part of forest fragmentation.
      - For the indicators on Species of Diversity indicator 7 and species extinction was discussed in some detail. The way species extinction is represented should be reevaluated to more realistically portray the data. For example, data extremes or hot spots like Hawaii skew the data. Similarly, the data currently includes species extinction from all land types. A more realistic profile might be portrayed if only extinction data from forestlands were used.
      - The discussion on indicators 8 & 9 is circumspect and is not as broad as the initial intent of the indicators. The information on these indicators is not consistent with what is presented in the more detailed data chapter. The summary serves to ‘marginalize’ indicators 8 & 9.
      - Criterion 1 should address old growth more specifically because it is such a critical issue.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

***Criterion 2 – Maintenance of Productive Capacity of Forest Ecosystem***

- Begin with Forestland (rather than Timberland) and describe the definition of available vs. non-available timber to describe the true inventory.
- Include regional data and trends, especially when aggregation masks local trends.
- Describe ownership patterns and changes when showing harvest data.
- Use consistent definition across C&I, e.g. IUCN data, planted vs. plantation etc.
- Indicator 14 – NTFP - will have to be described and reported regionally.

***Criterion 3 – Maintenance of Forest Ecosystem Health and Vitality***

- Break down the data in ways that help to tell the full story of what is occurring. For example, it would be useful to see a breakdown of impacts of both processes and agents such as fire, insects and disease by forest type (mentioned in indicator 15). Represent the data on area and percent of forest land subject to adverse levels of air pollutants in terms of both exposure and susceptibility. For areas that have extreme air pollution caused by urban areas, such as CA and the South, it would be better to break out those data sets so we can get a truer picture of the source. Break down information on affected forests by age class.
- Explain the correlation between different elements of indicators. For example, describe the correlation between tree mortality and tree age/diameter. Explain the linkages among different types of disease or injury, such as any linkage between ozone and pests. For fire risk, more explanation of what Class 3 conditions means is needed.
- If the range of historic variation is used as a reference point, the rationale for using it, the meaning of it, and how it is used must be explained. For example, describe the correlation between tree mortality and tree age/diameter. Explain the linkages among different types of disease or injury.
- Try to identify if changes from the range of historic variation are due to natural processes or to past management practices, and if they could be mitigated by future management activities.
- We need to know the threshold used to determine if a problem is indicated by tree mortality and how this threshold was chosen.
- Models of insect/fire mortality are useful for understanding the system, but not for early warning of potential problems. Stand conditions are helpful as an early warning system.
- Indicator 15 does a good job of describing the current status of the area and percent of forests affected by processes and agents beyond the range of historic variation. Don't assume that the time measured is a static or dynamic moment in history.
- Use crown closure – in addition to mortality – as a measure of diminished biological components indicative of changes in ecological processes.
- Indicator 17 is less useful than the others in this criterion as currently written. However, it has the potential to be more valuable than the others because some elements of it can be directly and easily measured and we know a lot about the

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

relationships among these elements, and because these are the things we can manage directly.

***Criterion 4 – Maintenance of Soil and Water Resources***

- Overall there is a difficulty correlating soils and water data location in forests. Show how this data is connected to watersheds and what it means for forests.
- The ability to look at the information about soil and water at the regional and state level would make the summary report more useful for stakeholders. (NRCS does have a state level database.)
- Drawing out trends from the indicators on soil and water would help people to predict where problems might arise.
- Present flow and timing data in a simpler format.
- These indicators are extremely useful, but the data is not presented for all of them. The most meaningful indicators, based on the information presented in the report, are persistence of toxic substances and soil erosion. Soil compaction and peak flow are also critical indicators, but they are not useful with the way the data is currently presented because it is not related to forests.
- Discuss erosion as a natural process as well as a process caused by activity.
- Several suggestions were made for how to approach the indicators for which data is lacking:
  - For flow and timing, use data on the cumulative construction of dams and water storage to show what is occurring.
  - For water chemistry, the National Water Quality Assessment data is limited because it doesn't get at where the changes are happening. However, there is EPA data available which shows the differences in water chemistry on forest land in comparison to agricultural land and urban land.
  - Use land use data correlated with water data to make inferences about the causes of changes in water quality.
  - To fill in the data gaps for area and percent of forest land managed primarily for protective functions, a suggestion was made to utilize EPA's Safe Drinking Water Assessment which shows states that obtain drinking water from surface water, and correlating this with states shown to have forest cover.
  - For Indicator 23, the percent of water bodies in forest areas with significant variation of biological diversity, a national map with this information can be found in EPA's rapid bioassessment.

***Criterion 5 – Maintenance of Forest Contribution to Global Carbon Cycles***

- Interpretation of Data: Authors need to consider whether or not chapter 2 should include some interpretation in addition to interpretation contained in Chapter 4. Interpretation in Chapter 2 should be at the criterion level in order to answer the question "so what?".
- Long-term Trends by Region: Important not to mask regional trends by only

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- discussing data at national level. Long-term regional trends in carbon data important because will indicate some aspects of history in forest management in US (e.g., decreases in timber extraction)
- Life-Cycle Analysis: Life-cycle analysis of wood products should be highlighted under criterion 5. Also, need to consider life-cycle analysis in broader context (e.g., how does aluminum throughout its life-cycle affect forest management in US?)
  - Forest Conversion in Relationship to Development: Need to perverse carbon stored in forests in United States by preventing development of forestlands. Conversion to urban uses is particularly troublesome because so hard to convert “black top” back to forests and thus, the carbon is permanently lost from forest environment.
  - Capacity of United States: Need to acknowledge U.S. ability to report on data and to produce this report; many countries do not have these capabilities.
  - Relationship to Climate Change: Need to discuss carbon data as related to climate change, particularly as related to future actions (chapter 5).

***Criterion 6 - Maintenance and Enhancement of Long-term Socio-economic Benefits to Meet the Needs of Societies***

- This sort of workshop stimulates, in fact seeks, criticism. With all this criticism swirling about, the groups did not want lost the unanimous recognition that this report is a heroic effort and an impressive beginning.
- Disaggregation of Data - The groups recognized that this document is national in scope, but the feeling was that national data obscures socio-economic realities experienced in regions. There was a strong sense that there needs to be a disaggregation of data by local, state, and region, or at least a placeholder when data is not yet available – with an explanation about the general lack of or lack of quality information
- Terminology – several terms were seen as problematic and needed to be more clearly defined and used consistently across the criteria – such as wood products and forest dependent communities.
- Investment in Forests
  - Definition of investment in forests needs to be expanded beyond wood and wood products to include a broader range of items (e.g., water and water quality, recreational activities, etc.)
  - Measures of educational investment need to be broadened to include community colleges, industry and non-profit training programs, among others, offering training in forest management and capacity-building.
  - Investments in local social capital needs to be counted.
- Employment Data – Employment data, as enumerated in this document, includes people employed in state and federal forest services and corporate timber workers. It does not count self-employed forest workers – micro enterprises and independent timber contractors – and the sense is that these folk are significant contributors and even growing in number.
- Spiritual and Cultural Values Related to Forests - Need to capture spiritual and

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- cultural values of forests in a manner that is broader than just IUCN (Int'l Union for the Conservation of Nature) protected categories. And this needs to include recognition of the spiritual and cultural values of traditional rural lifestyles and independent forest contractors.
- Graphics – The use of graphics to illustrate points was appreciated, but the group felt that more and better graphics were needed. They should be used in place of text, adding annotations to clarify when needed. Critical Point: Figures should be able to stand alone.

***Criterion 7 – Legal, Institutional and Economic Framework for Forest Conservation and Sustainable Management***

- There is a need to identify more trends.
  - For example, need to examine the flow or changes in infrastructure capacity for wood processing.
- There is a need for more details.
  - Indicator 51 - more information on state bmp's in particular which have voluntary versus regulatory. Where are they working? How much land is covered by them? How effective are they?
  - Break information out by ownership category.
- There is a need for more examples, especially sidebars – highlight what groups are doing or break down national information into regional trends.
  - Examination of national and state enforcement of laws and regulations (e.g., costs associated with enforcement and compliance rate of voluntary versus regulatory statutes)
- Address issues of scale – go beyond national to regional, state, and local.
  - With green accounting move from national to state level.
- Acknowledge contributions of underrepresented groups and non-traditional sources of information.
  - Harvesters
  - Community-based research and education.
- Criterion 7 needs more details regarding the organizational framework. For example, challenges of definition, scope, and data gaps as cited by the University of Minnesota during the Criterion 7 presentations.

**Chapter 3 – Current Actions in the United States**

- Numerous participants did not understand the purpose of Chapter 3 or found it confusing and difficult to select or recommend the examples that should be included in the chapter.
- Others who understood the purpose expressed frustration with the content and the stage of development of the Chapter, but supported its inclusion in the report. One group suggested that the chapter should be included but be placed after Chapter 4 rather than before.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- One group expressed concern with the perception of promotion and questioned whether the intended content should be included as a chapter and suggested that the possibility that the compilation of current actions should be more inclusive and included in an appendix as a compendium.
- Several groups suggested that the criteria for selecting the examples be clearly stated. Some of the suggested criteria include:
  - Geographic diversity
  - Interest group / values diversity
  - Different scales
  - Innovative new approaches as well as efforts that have been around for a while
- Several groups suggested that the examples should give primary emphasis to “on-the-ground” activities.
- Two groups suggested that the examples all need to show a clear link to SFM and to the C&I, and should include a clear statement about the effectiveness and/or outcomes of the action.
- One group went so far as to suggest the chapter should only include examples of actions that are working on or are attempting to integrate the three pillars of SFM.
- The categorization scheme needs to match the selection criteria and needs to be used to organize the presentation of the information. Some groups suggested that some statistics should be used to describe the full breadth of activities/ organizations contributing to the effort for each category (e.g., number of consulting foresters). Another group suggested the categorization scheme should be organized around functional areas such as on-the-ground efforts, policy-oriented efforts, research efforts, etc.
- One group felt that the examples should be fewer in number (e.g., 10 rather than more) and should include more of a case study approach rather than brief one-paragraph vignettes. Another group felt that only including 10 examples was not sufficient and suggested 20.
- Another group suggested that the groups that are being considered for inclusion should be contacted and ask to explain how they think they meet the selection criteria for being included in the report. Another group felt the detailed description should be gathered after the efforts have been selected for inclusion.
- Several groups (perhaps all) expressed support for information to be collected on a very large number of efforts and be disseminated as part of a website / clearinghouse function associate with the report, if not included in the report – sort of like a “Data Volume” on current actions.

**Chapter 4 – Interpreting the Information**

- All the groups supported the inclusion of criteria level summaries in the report but had different ideas about whether they should be included in Chapter 2 or 4. One group discussed the possibility of using disciplinary experts to produce the criteria level summaries.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Building on the support for criteria level summaries, one participant suggested that not only is there enough data to do this, but an effort should be made to determine which indicators might not be needed to produce such summaries in the future.
- A suggestion was made to shift from a focus on interpretation of the data to a focus on synthesis of the data.
- Differing views were expressed about how far the report should go in interpreting the data. One group recommended that the report just stick to the facts and avoid addressing “policy.” Other groups felt that it was very important for the Forest Service to answer the “so what” question. Specifically, suggestions were made to be clear about trends toward or away from sustainability, or whether it is not clear; or whether there is more, less, the same, etc.
- Some groups thought the idea of developing an index or a set of indices was a good one but all who did recognized that it is not yet possible to do this.
- Some participants expressed support for the use of benchmarks and thresholds wherever it was possible and appropriate to do so (medical health benchmarks analogy).
- One group suggested that Chapter 4 should provide examples of how the C&I can and are being applied at multiple scales / levels (e.g., NE region, State of Oregon).
- Several groups expressed support for identifying indicators that can be considered key indicators for that criterion, or significant because of the linkage with indicators under other criteria.
- All groups agreed that the report, and Chapter 4 in particular, should be written in a way that fosters dialogue. Several groups expressed support for encouraging representatives of diverse stakeholders to produce their own interpretations in an organized and coordinated manner (e.g., under the auspices of the Roundtable).

**Chapter 5 – Future Plans**

- Chapter 5 should focus on the changes necessary to address the areas in the report identified as needing improvement. Success stories could be used to highlight the direction in which these improvements could take us. In addition, Chapter 5 should clearly establish ways in which stakeholders can have continued involvement with authors producing this and future reports, as well as other future actions identified in the report. Chapter 5 should address our current understanding of sustainability and our progress moving toward it, as well as the limitations of the report.
- Some examples of future actions include developing an index of leading indicators, filling data gaps, developing methods of data collection (particularly in the area of socio-economic and legal and institutional indicators), geospatially locate data, and resolving issues of definition (e.g., forest, fragmentation and parcelization, sustainability, etc.) A number of stakeholders felt that in the future, stakeholders should be able to disaggregate national scale data to the local and regional scale.
- Many stakeholders felt the report should be written in value-neutral terms and provide information that is applicable to different audiences – not just the USDA

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Forest Service. Other audiences include but are not limited to decision and/or policy makers, local and regional users, and international audiences. Many stakeholders saw a particular need to make the report applicable on a national scale.
- The report should be available in different formats tailored to the needs of the different audiences. The report should facilitate data interpretation as well as identify areas where improvement is needed. It should be available in different forms including CDs, websites, and other venues. Some stakeholders suggested that the different report formats should be developed in combination with outreach strategies for different audiences.
  - Many stakeholders felt there should be an executive summary or a ‘cliff notes’ version of the report because many readers will not take the time to read the full report. Some stakeholders felt the data chapter should provide more detail than is currently available in Chapter 2. Others suggested producing a 50-page ‘popular’ version of the report that indicates clear trends, the process for engaging in the dialogue on the meaning and application of the indicators, and seeks to unify and empower stakeholders to participate.
  - The report is not an end unto itself, but rather the first step in a multi-step process. There should be a flow chart or road map of where the report fits into what multi-step process.
  - The report and database should provide a ‘clearinghouse’ function where stakeholders can access different kinds of information for a diversity of purposes.
  - Many stakeholders felt there was a role for the Roundtable on Sustainable Forests in facilitating discussion on areas of future action and helping to inform different audiences about the meaning and application of the report.
  - The Roundtable could convene a post report dialogue on interpreting Chapter 2 of the report. Some suggested inviting analysis and policy reports from advocacy groups for this discussion.
  - Make the 2008 report a ‘living document’ that reflects an accessible, historical continuum of data. In addition, ‘let the land tell the story’. Take stock of current land management practices to help evaluate our progress towards achieving Sustainable Forest Management. Draw links between landscapes of the whole system (not just forested areas) and describe the connectivity of all systems.

## **Chapter 1– Describing and Measuring Sustainable Forest Management**

### **Purpose of the Report**

- The purpose of the National Report is not clear or consistently represented. Whereas the purpose is described on page 1 as “to enhance understanding of ecological, social, economic...,” on page 3 in the last full paragraph, the report “does not attempt to define what particular combination of ecological, economic... would constitute progress overall in achievement of sustainable forest management.” Define the purpose of the report base on the national goals of the future. The goals of the report need to be more clearly articulated.
- The purpose of the report should be clarified. As currently written, it is still unclear how the data will be used. Will the data be ‘put out there’ for all stakeholders to interpret or not?
- Add examples of how the report may be useful/be used to help the reader understand its applicability.
- This chapter should suggest how and to what extent the data in the report will be interpreted.
- The purpose should be based on where the nation wants to be in 10 years.
- The report needs to better define what is meant by ‘progress’, in addition to whether and how progress will be measured.
- It is difficult to be more specific without further clarity on the definition of key issues like fragmentation and forested land.
- The overarching purpose of the report should be stated up front including what is unique, exciting, and innovative about this report and why was it produced? It takes the reader a while to understand that the C&I have something to do with the report.
- The Report should clearly state up front that the level of application is ‘national.’ However, it would also be useful to describe the idea (in 1-3 paragraphs) that the Montreal C&I can be used at different scales (local, regional or national) and should point the reader to some examples in Chapter 3.
- A disclaimer should be included early on that the report is not intended to form the basis for new forest regulations (especially of private forest landowners who may be suspicious of the report’s intent).
- The Report authors should describe their hopes and aspirations for the report’s applications at the beginning as well as the process for achieving those aspirations so that readers will also be inspired to read and apply the report. In this vein, the report should clearly articulate the process for how better data, will lead to better decisions and ultimately, better outcomes. This is stated but the pathway is unclear.
- It is important to move forward on resolving the issue of forest definition so that indicators are accurately reported.
- Be clear the goal is not to describe what sustainable forest management is, because that is what the title and first sentence may indicate to some.
- Need an introduction before Chapter 1 that sets the tone, will capture the reader’s attention, and get him/her excited about the report. The first paragraph on page 2 of Chapter 1 does this; the authors might begin with this.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- All the information is there, but it needs to be reorganized. Describe the state and trends of forest condition first, then talk about sustainability.
- Chapter 1 should give background explaining why the concept of sustainability is important and the impetus behind the Montreal Process to set the stage for why the report is being written. Say something about how and why the particular C&I were selected.
- The Report should undertake some evaluation and analysis, and not leave it completely up to the readers to do this (Rethink the sentence that mentions this in the first paragraph of page 1). We need to see more synthesis by the authors to at least take readers part way down the road in understanding what the criterion mean. If statistics are provided without any analysis, the question arises: “So what?”
- It’s hard to take a journey if you don’t know where you’re going. Where’s the action? (see second sentence in the chapter.)
- This chapter should set the stage for the rest of the document not try to be a summary. Need to clarify the purpose of the chapter and excite people – leading them to read on.
- Make the Executive Summary distinct from chapter one.
- Needs a preface which should include where the report came from.
- The historical perspective is missing regarding why we should be spending time on this now.

**Structure of the Report**

- Chapter 1 needs to be divided into a preface, executive summary, and Chapter 1.
- The ideas of 1) sustainable development as journey not destination and 2) that the report will not be defining conditions should be moved to earlier in the chapter.
- The groups felt that the purpose and transition to Sustainable Development Indicator work on page 3 was confusing.
- Simple graphics and figures would help explain concepts of sustainable development and sustainable forest management more clearly. Examples of some graphics include:
  - Interconnections between three components of sustainable development.
  - How the seven criteria influence sustainable forest management (see graphic used by Oregon in brochures).
  - List of the C&I in tabular form.
  - Pie charts illustrating change over time (e.g., amount timber harvested).

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Chapter 1 should provide links to other chapters, including:
  - In Chapter 1 should acknowledge that C&I method to measure sustainable forest management, but C&I do not indicate how well sustainable forest management is being implemented. This limitation needs to be stated in Chapter 1 and actions to address this limitation should be discussed more explicitly in Chapter 5.
  - Chapter 1 needs to set context for Chapter 3 by addressing how the C&I are translated at the national, state, regional and local levels to current and future action. Chapter 1 needs to explicitly recognize actions at different scales, not just the national scale.
  - The idea that the report is not defining conditions needs to be recognized in other chapters of the report. Paragraph 4 on page 3 states this, but the concept gets lost in later chapters.
  - Some of the concepts in Chapter 4 need to be highlighted in Chapter 1. For example, rather than only say what report does not do (i.e., does not define conditions), Chapter 1 should also include what report does do – the writers should make a more positive statement in Chapter 1.
- Chapter 1 also needs to recognize international implications of forestry in the United States and discuss the links between supply and demand of timber.
- Additional sources and references to be included in chapter 1 might include:
  - Citing additional references (e.g., website references); and
  - References to additional reports or lists of organizations conducting work (e.g., list institutions conducting research).
- One idea that might offer more clarity within Chapter 1 is to alter the structure to include boxes or vignettes.
- Not all groups talked about the need for an executive summary, but the ones that did clearly thought there should be an executive summary and that once it was produced it might affect the content of the introduction.
- Re-examine and revise the introduction after the entire report is written (often save writing the introduction until last).
- Forest Service should consider asking 3 technical writers to review the draft and provide rewrites or suggestions and see what they do with it.
- TIMOs should be separated out from NIPF.
- A glossary of terms used in the report should be created and put in an Appendix. These terms should also be used and applied consistently throughout the report.
- The chapter should highlight some of the report's key trends in the beginning and use these trends to demonstrate the kind of key management information the report can and could provide.
- For page 3, paragraph 4, one participant noted that the report *should* 'attempt to define' what particular combination of ecological, economic and social conditions and trends would constitute progress overall in achievement of sustainable forest management.
- Page 7, the last paragraph is confusing as it describes forest ownerships and patterns. It needs to be re-written to compare 'like' things and clarify what are the key points.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Context of the Report**

- Providing sufficient context for the report is important. This section could be improved with tools like maps to show key comparisons.
- Sustainable Development Indicators (SDI) should be highlighted in this chapter because they represent a pervasive and important concept throughout the report.
- The linkage between SDI and the C&I should be expanded.
- Chapter 1 should also address the following concepts, which are missing from the current draft:
  - Stakeholder involvement began in 1994 before the formation of the RSF;
  - First Approximation Report should be mentioned to offer context of document;
  - Linkages with other C&I processes in other countries;
  - Better explanation of European C&I process; and
  - C&I processes and sustainable forest management work in tropical countries.
- It should put this United States version in the context of our culture. So, for example, it should discuss our unique land ownership structure (looking at it from an international perspective) and address private ownership of forest lands.
- In addition, the chapter should reflect regional differences, such as the fact that western forests are mostly on public lands, whereas eastern forests are largely privately owned.
- Incorporate values into report in some respect to set context.
- Set the context for some of the critical issues that will be/need to be addressed in this section (e.g., unresolved or controversial issues like fragmentation).
- Hal Salwasser's presentation would add richness and context to this Chapter. For example, his four thoughts, context, goals and means. Use his slide of change from 1600's-2050 forest per capita. (Hal has a broad array of 200+ slides. What we saw was only tip of the iceberg. Look at the rest of his stuff.)
- Put map of Montreal Process and populations in document, giving another piece of the global context.
- We are in a distinct place from other countries. Address land ownership, particularly, as compared to other countries. Land is federally owned in other countries, we have private landowners. This is a critical part of our context

**Historical Context**

- Some groups felt that the history section was good and were positive about it; others thought it should be expanded or be part of the appendix.
- Those that felt the history section should be expanded thought that there is a need to include other time periods, such as a history of how forests have evolved from:
  - The earliest period of human settlement to the period of European settlement;
  - European settlement to the 1960's and 70's (i.e., start of the modern regulatory regime); and
  - From the 1960 to 70's forward.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Other suggestions for the history section include:
  - A description of how the C&I came to be and how they might be changed in the future;
  - Using the three pillars of sustainability as an organizing framework for the history section; and
  - Describing the history of sustainable forest management.
- The section on background is lacking in some important information on the general history of United States forests. For example, there is no information on the impact changes in fuel use (e.g., the transition from using wood and the primary source of heat to coal), or the consequences of introducing railroads as a means of transportation across the country. Regional differences are also not effectively represented.
- A question was raised about how far the United States should reach with the indicators, and whether the emphasis should be broad or more focused on selected issues like fragmentation.
- The discussion of the harvest history within the United States would be improved by addressing the following:
  - Address the fear of timber famine in early 1900s and the response of increased timber harvesting on federal lands; and
  - Discuss why the majority of harvesting occurs on private lands when the majority of land is owned by public entities.
- Graphics might help to illustrate the harvest history and might reduce the amount of text that needs to explain the history.
- History of sustainable development in forest context should be explained by addressed the three components of sustainable development (environment, social, and economic).
  - History of the environmental movement and social change within the United States are completely missing from chapter. The history should not focus only on timber history in United States, but should be expanded to include the entire context of sustainable forest management.
  - History on the community movement should be included in the history discussion.
  - To address the economic component of sustainable development, the history of economic indicators (e.g., forest employment) should also be discussed.
  - The history leading up to and resulting in the Montreal Process does not appear in Chapter 1 and should be included.
- History discussion should be expanded to include the history of factors affecting forests today. These factors include wildfire, changes to the land base and others.
- The history discussion should try to answer the question “Have the forests been managed sustainably in the past or not?” without making a value judgment.
  - The report may not be able to avoid value based judgments because values have caused changes that have lead to sustainable forest management today.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The question may be addressed by discussing the dominant values of time that affected forest management (e.g., timber harvesting after WWII and more environmental focus after the first Earth Day).
  - Writers might consider engaging Forest History Society or other forest historians.
- History discussion also needs to address global context of report beyond forestry and how this context influences the United States. Information from the RPA reports might be helpful in setting this context.
  - Can we make history compelling so explains why the United States is completing this report?
  - Expand the history discussion to include additional aspects of sustainable forest management, including the three components of sustainable development, and factors affecting sustainable forest management today (e.g., land based changes).
  - Include additional sources and references to address concern of making the history broader.
  - Participants felt the history was useful to have but that it should be focused on the historical context for sustainable forest management and the use of criteria and indicators in the United States (both prior to and after the Montreal Process).
  - Many felt the historical background was too dense and prevented them from easily grasping the purpose, context and scope for the report. They suggested that much of the background section could be shifted to an Appendix in order to not bog down the report and allow those familiar with United States. forest management history. What should be left in Chapter 1 are the key issues relating to the history of sustainable forest management and the use of Criteria and Indicators.
  - The history is interesting and reasonably accurate but much is left out such as the Tree Farm System, State BMP programs, the national Wilderness System, changes in harvest sources from natural forests to tree farms. (One participant noted a good source of information in Sally Fairfax's book on state land endowments.)
  - The chapter should mention and contextualize the relationship of sustainable forest management to other systems such as tree farms or certification.
  - The chapter should make a link between the movement towards sustainable forest management and how that reflects a change in society's value systems.
  - One participant suggested that the chapter describe the link(s) between the concept of sustainable forest management and sustainable yield.
  - The impacts and influences of regulations on sustainable forest management should also be included such as the Endangered Species Act which has dramatically affected and shifted timber supply and demand by region.
  - There should be more information on changes that occurred prior to European time, e.g. natural changes from ice ages, and other populations and cultures such as Native Americans. Along this vein, several participants also noted that forests naturally evolve over time (e.g. pine forest to hardwoods) and land uses change to, but the report makes the forests appear to be static environments. Several participants also suggested the role of the Spanish and French colonists should be included as well.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The chapter does not cover the history or context for sustainable forest management. One participant noted that the notions of sustainability did not simply initiate with the United Nation's but have been a hallmark the land stewardship movement in America dating back to the turn of the century (and possibly earlier).
- The concept of multiple use for our forests should be better explained. One participant noted that during the 1870s to 1900s the USDA Forest Service managed forests for water supply and other objectives in addition to timber.

**As is reflected in the comments recorded below, there were several differing opinions about this section of Chapter 1.**

- The section on history of United States forests is too wordy.
- The section on historical context is not long enough.
- This section should not be much longer than it is currently.
- The section on history is good. It is an incredible piece of work. Background information is well done.
- Add information about the trends mentioned in Hal Salwasser's presentation.
- The information is somewhat Forest Service-centric.
- In addition to what is already written about the historical context, three time periods should be covered:
  - Prehuman/geologic (This would provide a description of long term trends and how forests got to the state they were in in 1600.)
  - Modern day forest management from the time of passage of milestone laws, such as the Clean Water Act. Information about relevant movements such as the conservation movement, and about controversy and developments that lead up to the common usage of the term sustainability needs to be added.
  - What has occurred since the Montreal Process?
- Reference to North American excludes Hawaii and Puerto Rico. In general, the report is not inclusive of these areas of the United States.
- Report must mention the tension between the need for timber and the need for water.
- It is implied that forests are only about timber production by omission of other forest uses. Chapter 1 needs to mention and describe grazing, wildlife, water and non-timber forest products.
- The description of the regulatory environment on public lands is not sufficient. Explain the distinctions between regulations in different states or parts of the country. For example, OR, WA, CA have extensive acts regulating forests. A statement could be made that the Pacific Coast states have taken a step beyond that taken by the federal government in terms of regulation.
- Does the subject of regulation really deserve this much attention or level of detail in the report?
- On page 8, the discussion about regulations should be separated out from the discussion of certification.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Intended Audience**

- Several groups thought that the purpose of the report and its primary intended audience are unclear. If the report is intended for the general public, it misses the mark and is not readable or accessible. Why is the report important?
- Writers need to keep the audience of the report in mind when writing the various chapters. The intended audience of the report should be broad and the report should be understandable to the intended audience.
- Chapter 1 needs to flesh out the idea that the report will be shared with an international audience because the Montreal Process is intended for countries to share ideas.
- Writers need to remember that the report is a domestic product as well and, therefore, they need to address domestic origins of report and the development of report process and stakeholder involvement domestically.
- Make sure that report addresses intended audience (e.g., is this draft appropriate and understandable for public)?
- The way the report is written using technical terms makes it inaccessible to the general public. A companion document should be produced for the layperson.
- Including an executive summary of report geared towards policy-makers would be useful.
- Written for bureaucrats rather than participants. It's boring; my eyes glazed over.
- Audience should be the public. People prefer concise language, diagrams, graphics. Get the West Wing writers to edit this.
- Need to look at all perspectives, including rural communities.
- Remember that audiences are diverse.
- The chapter needs to engage the audience with graphs, concise statements, and an explanation of the importance of this report.
- The information contained in the report should be “user friendly,” so that it is helpful to educators.

**Sustainable Development and Sustainable Forest Management**

- A number of groups thought the discussion of the definition of sustainability was not clear in the sense that it does not adequately stress the primacy of the definition that gives equal emphasis to all three pillars of sustainability.
- There is a need for more clarity on what is meant by ‘sustainability’ (e.g., is it ecological sustainability or is there some other characterization that should be used?) As an alternative approach, the report could include a discussion on what the key alternatives to the definition might be.
- The term sustainability needs to be defined. Does the term as used refer to ‘ecological’ or some other characterization of sustainability?
- The chapter needs to make sure that all elements of sustainable forest management are addressed in chapter. The chapter should not focus exclusively on timber, especially because entire report addresses all aspects of sustainable forest management in later changes not just sustainable timber management. The chapter should be related more to entire report.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The chapter needs to better describe implications for communities in context of sustainable development and sustainable forest management, including the history of community-based forestry.
- The chapter should also address how sustainable development and sustainable forest management are implemented in the US. To address this issue, the writers should answer the following questions in chapter 1:
  - Who provides leadership in sustainable forest management?
  - How are sustainable development standards set?
  - What is the role of government?
  - What are the public/private partnerships?
  - What states provide leadership? What federal agencies provide leadership?
- The writers need to make sure that certification is not equated with sustainable forest management. The two concepts need to be kept separate throughout the report.
- The writers need to make sure that the reader understands that sustainability is a continuum that varies from the “gold star” to the “black star.”
- The information presented here on these terms is comprehensive and accurate. One of the participants did a study on the use and evolution of the terms historically, and what is written in Chapter 1 reflects what she found in her study.
- Defining sustainability is not as difficult as operationalizing it. We are in a state of learning how to do this, but we do need to have enough of a conceptual framework to guide collection, interpretation and practical application of data.
- Placing a value on actions as sustainable or not is the challenge.
- Authors need to resolve the dilemma about what we do know versus what remains unknown about sustainable forestry.
- The chapter doesn’t need so much discussion on whether sustainable forestry management (SFM) is important. Just state that it is and move on. The point is moot. We signed an international agreement.
- Define ‘sustainability’ as it applies to forest ecosystems.
- Address integration and interconnectedness of sustainable development and its components.
- Examine SFM from a perspective outside of our “ethno-centricity.” Consider the notion that private land ownership can lead to lack of sustainability.
- Define what is meant by “progress” towards achieving sustainable forest management more clearly, and explain whether and how progress will be determined. In other words, will trends in data be evaluated and if so, how?

**Issue of Scale**

- How do region/state/local folks relate to this national report?
- How can this report better reflect local/regional realities/differences? East and West settlement patterns differed and, therefore, the forest situation and cultures are different.
- Consider landscape level implications – landownership has implications here. There are mixed ownership patterns.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Employment and Community Needs**

- What about employment in tribal forestry? Park Service? Bureau of Land Management?
- Instead of using counties for examining local data, evaluate data using zip codes (See Indicator 46).
- Since the data can't be broken down by communities include case studies of communities.

**Synthesis and Interpretation of the Information**

- Some participants are disappointed at not seeing recommendations for what we should be doing to make practices more sustainable and looking forward to seeing this in a future report.
- Readers want some guidance from the Forest Service/authors regarding interpretation of the data.
- The Criterion sections tell us what they are and the source of information, but they need to also tell us what function they serve and how to use them. Simply telling us what the indicators are won't get us to sustainability. We need to know what direction they need to move and what the target is.

**Additional Comments**

- The chapter needs to explain that the primary application of the C&I are national, but that the report will include sub-national trends and conditions where necessary and appropriate in order to paint a true picture/tell a true story.
- Some groups felt that it would be impossible for this report to be value neutral.
- It might be helpful to relate the C&I to other similar models to more clearly understand their utility and what they are.
- Include more background on the context of the C&I and why they are represented as they are (e.g., more history on the diplomatic ambiguity of the C&I).
- To establish broad-based agreement as to what should be measured (and how it/they might be measured) in order to have constructive dialogue toward resolving sustainable forests 'issues'.
  - 'Issues' = Conditions that characterize a sustainable forest ecosystem.
  - 'Issues' = Both conditions that characterize the sustained forest ecosystem and other social/economic/cultural circumstances/factors that affect what the actual forest conditions will be.
- Dialogue between stakeholders should not be end goal of this report or the process to process the report, but rather the report and the dialogues that occur throughout the process should help to inform decision-making.
- The report should emphasize the linkages between economic, social and environmental components of sustainable forest management.
- Chapter 1 should set stage for remainder of report and thus should include a road map for the remainder of the report.
- Acknowledge limitations in Chapter 1 (e.g., limitations of C&I, issues of scale, leadership in sustainable development).

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The report should explain whether and how the C&I might evolve or be adapted to meet the needs of the United States as well as local community groups. Several participants noted a need to better describe how the C&I were developed and how a group or individual might get involved in shaping their future development and applications.
- The chapter should also outline some examples of applications/implications for the C&I so that the reader can see their immediate relevance and purpose and be motivated to read on.
- A few participants noted a ‘disconnect’ between information needed to achieve on the ground measurement. They also noted that what is important locally may not be measurable. Therefore it may be important to make a statement about the need for quantifiable indicators as well as the role and applications for local knowledge and wisdom. It is also important to acknowledge the assumptions necessary to measure some of the indicators (especially for those indicators which are not directly measurable such as some of the indicators found in Criteria 6 and 7.
- The need to adhere to the Montreal Process Criteria definitions should be described along with recognition that they relate to things that are (or could be) measurable and the Report authors should acknowledge that there are non-measurable elements which are also critical to consider in moving toward sustainable forest management.
- One participant questioned the notion that we can’t say we achieved sustainability at least for some of the indicators such as those related to timber production.
- Add Dave Radloff’s diagram with the three circles.
- The chapter fails to connect people to the forests, including their consumption of wood products. Wood consumption is relevant to urban communities.
- The report is written from a forestry perspective. It needs to recognize integrated issues, like urban sprawl. Forest landowners are being pressured by urban sprawl, not just from the forest sector.
- The chapter needs a discussion on the underlying assumptions and values of this document and how they drive our reactions to data. (Quote: 6 Steps to a Sustainable Society. “The intensifying economic and social stresses of the early eighties reflect values and priorities that no longer mesh with the unfolding environmental and resource realities. As circumstances change, values must change accordingly. When they do not, societies do not long endure. Values then, are the key to the evolution of a sustainability society, not only because they influence behavior, but also because they determine a society’s priorities and thus its ability to survive.” The World Watch Institute, Worldwatch Number 48, Brown and Shaw, 1982).
- Note in the report the importance of cultural and special elements of forest land. As investments in land go away, culture and special elements could be lost as a result. As a result, credit private landowners with following best management practices and using conservation easements as methods of protecting cultural and special private forest land.
- Need to clarify that industrial and non-industrial is based on historical data, p. 7.

## **Chapter 2 – Criteria and Indicators: Data, Analysis and Discussion**

### *Criterion 1: Conservation of biological diversity*

#### **Indicator 1 – Extent of area by forest type relative to total forest area.**

- Indicator 1 – expand the discussion on the dominant forces shaping western forests to include the impact of fire exclusion and on forest.
- Indicators 1 & 2 are fundamental to other indicators within Criterion 1, as well as other C&I. (cross cutting issue). Indicator 1 is relevant to ecosystem, species and genetic diversity.

#### **Indicator 2 – Extent of area by forest type and by age class or successional stage.**

- Indicator 2 –
  - Use different age classifications and more discrete age groupings (different breakdown of the number of years old to determine what is classified as old growth) to help tease out information on different ages of growth.
  - Need a full and better explanation of what is meant by “no age data”. This categorization of data is not adequately addressed in the summary. Also, there is need for a better explanation for the designation of “all aged forests”.
  - Add more discussion on old growth.
- Develop a classification of early growth that addresses how long early growth lasts because the longevity of early growth has a direct impact on the growth of forests in the future.

#### **Indicator 5 – Fragmentation of forest types.**

- Indicator 5 - Fragmentation needs to be better defined and the description in the summary more comprehensive. Some of the ways in which the definition could be improved are as follows:
  - Include information on ‘core area’.
  - Include information on the impact of roads on fragmentation.
  - Include the impact of ownership on fragmentation. There may be some linkage with Criterion 7 in this regard. (cross cutting issue)
  - Do a better job integrating information about aquatic ecosystems in the evaluation of fragmentation because fragmentation impacts different ecosystems differently.

#### **Indicator 6 – The number of forest dependent species.**

- The representation of the numbers of species in terms of percentages differs in the data presentation and ranges between %10 and 20 percent. What is the rationale for these differences? The rationale should be clarified.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Species richness (number of different species) only tells part of the story. To get a more realistic profile of species ‘richness’ look more closely at different characteristics such as species function and integrity, and the evolution of subspecies.
- When you look at richness regionally, you get a different story from the national picture. Every place has its ‘signature’ richness.
- Fragmentation impacts different species differently.

**Indicator 7 – The status (rare, threatened, endangered, or extinct) of forest dependent species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment.**

- Indicator 7 - Consider different ways to represent species extinction.
  - Take out the data extremes or ‘hot spot’ such as extinction in Hawaii.
  - Represent extinction on only forested land versus extinction on all types of land.

**Indicator 8 – Number of forest dependent species that occupy a small portion of their former range.**

- The discussion on indicators 8 & 9 is circumspect and is not as broad as the initial intent of the indicators. The information on these indicators is not consistent with what is presented in the more detailed data chapter. The summary serves to ‘marginalize’ indicators 8 & 9.

**Indicator 9 – Population levels of representative species from diverse habitats monitored across their range.**

See comments in Indicator 8.

**General Comments**

- Make sure the Chapter 2 summary for Criterion 1 is consistent with what the data say.
- Make sure the interpretation of the indicators in Criterion 1 is consistent with the international premise for the C&I, and that the indicators are viewed as part of a system. Do not interpret indicators as isolated ‘pieces’ within a system.
- It is useful to include information on the linkages between indicators within Criterion 1 as well as between indicators within Criterion 1 and other Criteria. The Chapter 2 summary on Criterion 1 should address such linkages.
- Integrate more information on aquatic species within the ecosystems. Aquatic life is part of forests.
- General comments on Chapter 2 summary –
- The general tone of the Chapter 2 summary should be more neutral.
  - Include a glossary of terms.
  - Minimize the use of jargon.
  - Criterion 1 should include more information on ‘old growth’ because preserving old growth is a big issue.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- In the language in the summary, avoid focus on the related socioeconomic aspects of Criterion 1 and overreaching into Criterion 6 – focus on the biological aspects of the Criterion.
- Do more to integrate different data sets such as data on fish and other aquatic life that are also part of the forest ecosystem.

**Highlights**

- In general, the tone of the summary should be more neutral. The summary should include more information on the key characteristics about the indicators, and provide more explicit information about the linkages between Indicators within Criterion 1 as well as with other Criteria. For example, it was felt that Indicators 1 & 2 are fundamental to the other Indicators within the Criterion and with Indicators in other Criteria.
- Indicators on Ecosystem Diversity –
  - For Indicator 2 – on the Extent of Area by Forest Type Relative to Total Forest Area
    - Some suggested that a classification of early growth should be developed that integrates more realistic information on the shorter life span of this age category to more accurately reflect its impact on future forest growth and maturation.
    - More age classes should be added and the age range used to classify older growth should be reevaluated and possibly increased.
    - Additional information should be included for a fuller explanation on what is meant by ‘no age data’ as well as how ‘all aged forests’ are dealt with.
  - For Indicator 5 - Fragmentation of Forest Types
    - There is a need to clarify what is meant by forest fragmentation. Some felt the term should include a measure of ‘core area’. Others felt the term should incorporate the impact of roads while others considered ownership to be a critical factor. As well, some noted that because aquatic life is an integral part of a forest, it also should be addressed as part of forest fragmentation.
- For the suite of indicators on Species of Diversity the group discussed Indicator 7 and species extinction in some detail. Some felt that the way species extinction is represented should be reevaluated to more realistically portray the data. For example, data extremes or hot spots like HI skew the data. Similarly, the data currently includes species extinction from all land types. A more realistic profile might be portrayed if only extinction data from forestlands were used.
- Finally, many felt that Criterion 1 should address old growth more specifically because it is such a critical issue.

***Criterion 2: Maintenance of productive capacity of forest ecosystems***

**Overall Comments**

- The indicators listed under this Criterion do not seem to match the description that includes ‘forest ecosystems.’ It might be helpful to add a sentence describing

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- how these indicators do and don't relate to forest ecosystems and point to other indicators within the Criteria.
- The differences between forest 'cover' and 'use' should be described so that people understand the difference as it relates to the findings. For example, urban areas are often not classified as forested because the forested lands don't meet minimum sizes.
  - As group one did above, participants in group two noted that the indicators listed under this Criterion do not seem to match the description that includes 'forest ecosystems' and this should be explained.
  - Define terms and use them consistently, e.g. define the differences between what's 'planted' and a 'plantation.'
  - Need to explain the concept of tree 'mortality' versus 'removal' (dead versus salvaged etc.) and be consistent in which statistic is used to reflect volume.
  - Highlight and bring forward the key data and help the reader understand the important factors.
  - As noted by group one above, regional information and trends should be reported whenever possible.
  - It is very important to break down the data by ownership in order to understand trends.
  - It should be explained that these indicators only deal with 'removal' and not inventory.
  - How forests are defined should be explained (e.g. cover vs. use, what is/is not an urban forest etc.)
  - Consider adding text on what harvest systems are being used when reporting on this Criterion.
  - The IUCN definition used to define forest lands misses much of United States forest lands (e.g. national parks, forested conservation easements, special management areas, refuges, etc.) so data on 'available lands' is misleading. Also, what is actually 'available' may be misleading, e.g. a forest for which harvest is prevented due to laws or other landowner restrictions etc. A 'what's missing' sidebar could help to clarify the data along with some explanation of United States systems for protection. Work is underway to resolve some of these issues but this work won't be completed in time for the current report. The future report should seek to move beyond the IUCN system for reporting.
  - Shifts in 'availability' of timber lands should be correlated to shifts in ownership so that trends are easier to understand and this data should be reported regionally.
  - It would be useful to contrast state harvest and removal systems, regional differences and highlight relevant case studies (e.g. salvage logging not done across the United States).
  - As the other groups concluded, data should be broken out by ownership types and growth versus removal versus mortality rates. For example, describe where is the growing stock available, where is mortality the highest?
  - The terms 'timberland' and 'forestland' should be defined and used consistently across the indicators. The Society of American Foresters definition could be used for these terms and others that might go in the proposed 'glossary of definitions/terms' proposed by the discussion groups.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- On page 15 under Analysis, the discussion is confusing as to whether the timber supply is stable or unstable. This needs to be rewritten.

**Format**

- More language from the data report should be used to provide clarity on justifications used.
- All participants felt it is important to report regional data and trends, especially when those trends would be masked by the national data. As an example, Indicator 10 ‘Area of forest land and net area of forest land available for timber production’ may show net area in the United States has not changed but the pattern of where forests are harvested has decreased in the pacific northwest and increased in the southeast and this has implications for forest sustainability.
- When possible, point to specific local applications for the data (possibly through side bar examples).
- Note key trends (leaving analysis for chapter four) such as forested land loss due to urbanization, gaining and losing regions of the country, regional uses and ownerships and other key findings that help one understand the data findings.
- Consider trying to boil down the Rational section to one sentence to save space and refer readers to the data report if they want to read the entire text.
- Have a sidebar explaining what’s in the technical report so readers know when to refer to it if they need more information.
- It would be useful to begin the discussion of this section with the concept of ‘forestland’ and then explain how changes in sources of land ‘available’ for timber as well as other factors change the percent forestland available to be classed as timberland. It might be useful in the future to develop some subcategories for ‘use.’

**Other Data Sources**

- Utilize the ‘forester checklist’ that is applicable for properties of 65,000 acres and the data available through Robert Simpson and the National Tree Farm System surveys.

**Text Notes**

**Indicator 10 - Area of forest land and net area of forest land available for timber production.**

- Be careful in using terms consistently. Include a national data graph for this indicator.
- IUCN classes should be used and applied consistently here and across the indicators.
- Be careful to use terms such as ‘available’ vs. ‘suitable’ consistently.
- The graphic should represent ‘available’ timber lands.
- It’s important to note that land parcel sizes are changing so less land is available (or classified) as timberland. This should be linked to Indicator Five, ‘Fragmentation of Forest Types.’ A good example (and possible sidebar) is the Virginia study that created an equation to link changes in housing density with

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

declines in land available for timber production as a tool to assess fragmentation. Also refer to work by the Southern Research Station in this arena.

**Indicator 11 - Total growing stock of both merchantable and nonmerchantable tree species on forest land available for timber production.**

- Delete the Montreal Process definition for growing stock reference because it is confusing and extraneous.
- Species of ‘commercial value’ is a moving target (e.g. now we make spoons from Hornbeam). Need to be clear on how items are classified as ‘merchantable’ or ‘non-merchantable.’

**Indicator 12 - The area and growing stock of plantations of native and exotic species.**

- Clarify the phrase ‘almost all plantations...’ and avoid using unquantifiable or fuzzy terms.
- No trend data are shown here. It’s unclear how or when we decide to show trends.
- ‘Plantation’ should be defined and contrasted with regional differences (e.g. in the southeast they are single species plantations, often planted in softwoods while in the Pacific northwest they are augmented stands of existing forests using commercial hardwood species). Also other countries define plantations as only those that grow exotic species while most United States plantations are for native species and this may be interesting to note as well in the definition.

**Indicators 13 and 14**

- Refer to ‘levels determined to be sustainable’ but there is no definition of sustainability, so we need to clarify how those indicators are reported and be consistent in the format for the report.

**Indicator 13 – Annual removal of wood products compared to the volume determined to be sustainable.**

- Move the first paragraph under the Analysis section to the Criterion introduction because it provides useful explanation for interpreting data across the Criterion and quantify what is meant by ‘hardwood decline...’

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- It is difficult to measure volume versus sustainable levels. In Oregon they found that the number shifts in relation to land available for harvest overall so that a sustainable benchmark is difficult to quantify. At the national level this becomes even more fuzzy (e.g. nationally harvest may appear sustainable but one region could be over-harvesting while another is under-harvesting and this would not be evident). For this indicator, regional data are key and should be reported. Also the graph should have a third bar added for ‘actual harvest’ (see page 13 of sample brochure).

**Indicator 14 – Annual removal of non-timber forest products (e.g. fur bearers, berries, mushrooms, game), compared to the level determined to be sustainable.**

- Need to have a graphical/visual breakdown of what we do know and can determine, where are data available and relevant etc.
- The current statement is too negative – we know more than what the text implies. The current summary should be deleted. It’s also important to add some context for why it’s important to measure this particular indicator and what we can measure.
- Also consider having a wider range of items included under non-timber forest products such as fish, livestock forage etc. This entire indicator would be easier to report and put in context if broken into sub-categories because it is mostly useful and applicable at the regional and local scale.
- Need to inventory the supply of NTFPs not just removal – otherwise we can’t reflect on whether removal rates are sustainable (also there is no determined level of sustainability).
- Consider expanding what’s classed as a ‘non-timber forest product’ e.g. big game for which some data could be available through state user surveys, permits etc.

***Criterion 3: Maintenance of forest ecosystem health and vitality***

**General Comments**

*Break down the data in ways that help to tell the full story of what is occurring.*

- For example, it would be useful to see a breakdown of impacts of both processes or agents such as fire, insects and disease by forest type (mentioned in Indicator 15).
- Represent the data on area and percent of forest land subject to adverse levels of air pollutants in terms of both exposure and susceptibility.
- For areas that have extreme air pollution caused by urban areas, such as CA and the South, it would be better to break out those data sets so we can get a truer picture of the source.
- Break down information on affected forests by age class.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

*Explain the correlation between different elements of indicators.*

- For example, describe the correlation between tree mortality and tree age/diameter.
- Explain the linkages among different types of disease or injury, such as any linkage between ozone and pests.
- For fire risk, more explanation of what Class 3 conditions means is needed.

**Indicator 15 – Area and percent of forest affected by processes or agents beyond the range of historic variation, e.g. by insects, disease, competition from exotic species, fire, storm, land clearance, permanent flooding, salinisation, and domestic animals.**

- If the range of historic variation is used as a reference point, the rationale for using it, the meaning of it, and how it is used must be explained.
- It is difficult to set a baseline condition for this, but 1800 is very late as a starting date! One option might be to use much earlier date for East and a later date for west. Anecdotal evidence might go back as far as 1600's.
- Try to identify if changes from the range of historic variation are due to natural processes or past management practices, and if they could be mitigated by future management.
- Use tribal language and values to verify forest states from earlier times, and to explain why Native Americans were using certain fire practices.
- Indicator 15 does a good job of describing the current status of the area and percent of forests affected by processes and agents beyond the range of historic variation, but we don't know if the time measured is a static or dynamic moment in history. Acknowledge that climate is changing. We need to get away from the assumption that we are in a static regime.
- Range of historical variability provides a context that we can learn from.
- Range of historic variation is more useful for some aspects of indicators than others.
- Data presented in 15 is useful to establish a baseline.

**Indicator 16 – Area and percent of forest land subjected to levels of specific air pollutants (e.g. sulfates, nitrate).**

- Indicate that the results of declining sulfur pollution are due to the Clean Air Act.
- Use indicator species to determine forest susceptibility.
- Climate change should be addressed and included in this indicator.
- Graphics are useful – get message across.

**Indicator 17 - Area and percent of forest land with diminished biological components indicative of changes in fundamental ecological processes (e.g. soil, nutrient cycling, seed dispersion, pollination) and/or ecological continuity.**

- We need to know the threshold used to determine if a problem is indicated by mortality and how this threshold was chosen.
- Models of insect/fire mortality are useful for understanding the system generally, but not for early warning of potential problems. Stand conditions are helpful as an early warning system.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Use crown closure as a measure of diminished biological components indicative of changes in ecological processes, in addition to mortality (density is a primary measure, whereas mortality is a secondary one).
- Indicator 17 is less useful than the others in this Criterion as currently written. However, it has the potential to be more valuable than the others because some elements of it can be directly and easily measured and we know a lot about the relationships among these elements, and because these are the things we can manage directly.
- The goal should be to maintain the functionality of the forest.

**Additional Sources of Information to Consider**

- Bob Frankel at OR State on correlation between spread of noxious weeds and roads/autos/other carriers.
- Gary Machlis, Park Service, University of Idaho regarding Native American use of fire and the reasons for that use.
- Forest Service report on land conversion as the greatest threat to forests in the SE (Environmental groups doing additional analysis.)

**Comments on Other Sections of the Report**

The group would like to see Chapter 4 take a look at the first 5 criterion together.

***Criterion 4: Conservation and maintenance of soil and water resources***

**Highlights**

- Overall there is a difficulty correlating soils and water data location in forests. Show how this data is connected to watersheds and what it means for forests.
- The ability to look at the information about soil and water at the regional and state level would make the summary report more useful for stakeholders. (NRCS does have a state level database.)
- Drawing out trends from the indicators on soil and water would help people to predict where problems might arise.
- Present flow and timing data in a simpler format.
- These indicators are extremely useful, but the data is not presented for all of them. The most meaningful indicators, based on the information presented in the report, are persistence of toxic substances and soil erosion. Soil compaction and peak flow are also critical indicators, but they are not useful with the way the data is currently presented because it is not related to forests.
- Discuss erosion as a natural process as well as a process caused by activity.
- Several suggestions were made for how to approach the indicators for which data is lacking:
  - For flow and timing, use data on the cumulative construction of dams and water storage to show what is occurring.
  - For water chemistry, the National Water Quality Assessment data is limited because it doesn't get at where the changes are happening. However, there is EPA data available which shows the differences in water chemistry on forest land in comparison to agricultural land and urban land.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Use land use data correlated with water data to make inferences about the causes of changes in water quality.
- To fill in the data gaps for area and percent of forest land managed primarily for protective functions, a suggestion was made to utilize EPA's Safe Drinking Water Assessment which shows states that obtain drinking water from surface water, and correlating this with states shown to have forest cover.
- For Indicator 23, the percent of water bodies in forest areas with significant variation of biological diversity, a national map with this information can be found in EPA's rapid bioassessment.

**Soil**

- Change the colors in Figure 18.1 to better communicate the areas at moderate and high risk for erosion.
- Other databases may give better indication of regional conditions. Include this information.
- It was clarified that soil type/topography and the risk of erosion is represented, but actual erosion is not.
- Maps and information on Hawaii and Alaska are missing and need to be added.
- The authors need to look at where thresholds are set throughout report. In some cases, they look too low to participants.
- In the report, clarify the differences in the definitions of woodland and forest and how this affects the data provided.

**Persistent Toxic Substances**

- Clarification: Currently, actual accumulation is not measured, only risk.
- How is persistence defined? Make sure we get a more accurate definition.
- Set the threshold higher than 100 days, and look at lower parts per billion.
- Present use of toxins in forests as well as in agriculture (currently this is reflected in the report, but not in the figures).
- Present this information on a regional basis to give a more accurate representation of where use is occurring.
- Looking at trends could be useful (e.g. more pesticides used in certain areas of the country in earlier decades).
- Non-forestry activities also contribute to these risks. Possibly integrate other contributing factors in future editions of the Report.

**Water**

- The indicators on water should address biota as related to water.
- The information that is presented does not seem relevant to forest management or the resource itself.
- Presentation of this information (ie. HUCCS, etc) is dense. This makes it difficult to read and interpret.
- Need to relate this data more directly to forest practices. Include a national map that reflects water runoff trends.
- Separate forestry activity from non-forestry activity by using a GIS overlay.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

\*\*Because of the input he provided, the possibility of Jim Sedell taking over this criterion was posed and discussed at the end of the session.

***Criterion 5: Maintenance of forest contribution to global carbon cycles***

**Highlights**

- Interpretation of Data: Authors need to consider whether or not chapter 2 should include some interpretation in addition to interpretation contained in Chapter 4. Interpretation in Chapter 2 should be at the criterion level in order to answer the question “so what?”.
- Long-term Trends by Region: Important not to mask regional trends by only discussing data at national level. Long-term regional trends in carbon data important because will indicate some aspects of history in forest management in United States (e.g., decreases in timber extraction).
- Life-Cycle Analysis: Life-cycle analysis of wood products should be highlighted under criterion 5. Also, need to consider life-cycle analysis in broader context (e.g., how does aluminum throughout its life-cycle affect forest management in US?).
- Forest Conversion in Relationship to Development: Need to perverse carbon stored in forests in the United States by preventing development of forestlands. Conversion to urban uses is particularly troublesome because so hard to convert “black top” back to forests and thus, the carbon is permanently lost from forest environment.
- Capacity of United States: Need to acknowledge United States’ ability to report on data and to produce this report; many countries do not have these capabilities.
- Relationship to Climate Change: Need to discuss carbon data as related to climate change, particularly as related to future actions.

**General Comments**

- National trends need to be careful not to mask sub-national trends.
- Need to answer question: Why is carbon important to sustainability?
- Topics that group would like to see included in criterion 5 discussion:
  - Introduction and summary need to address conversion of forests and its significance; Need to be given same weight as insects and fire in the discussion of the Criterion.
  - Summary of Criterion 5 does not address “cycles” – only carbon pools, etc.
  - Biomass also not mentioned in summary.
- Need to acknowledge United States capacity to analyze long-term carbon data, especially given many countries could not accomplish such a task

**Interpretation of Data**

- Answer question so what? Include some interpretation of data in Chapter 2:
  - Combine interpretation in Chapters 2 and 4.
  - Possibility to answer question generally in the introduction of each criteria

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- in Chapter 2 and then address more specifically in Chapter 4.
- Need to be careful NOT to intermix policy with data interpretation in Chapter 2.
- Interpretation question needs to be addressed throughout report beginning in Chapter 1.
- Should include sidebars to illustrate potential interpretation of data in order to “what appetite for Chapter 4” (e.g., how do changes in regional forestland area affect carbon pools?)

**Graphics Used in Summary**

- Graphics of United States Forest carbon pools is very compelling and should be in the summary report.
- Carbon pools by age class:
  - Group did not necessarily understand influence of area on carbon pool in graphic; this needs to be clarified for the reader.
  - Including caveats, Criterion 5 should address question: does old growth contain more carbon than other age classes?
- Net forests carbon pool change graphic needs to be clarified in order to make sure reader understands real change (second derivation of change).
- Explain quality of data in net carbon change for wood products (e.g., landfill increasing not bad).
- Authors need to ask: Do graphics explain all data and trends? Need to make sure subtleties explained and “entire” story is clear for each graphic.
- Add note about carbon/area and area as components that change data in graphics (e.g., Figure 26-3).
- Importance of regional data should be emphasized whenever possible (e.g., Figure 26-2 age classes larger with regions or more age classes):
  - Changes in regional data over time are important.

**Life Cycle Analysis**

- How other materials relate to wood products and forest management (e.g., What is impact of aluminum on forest and carbon?)
- Trends of wood in use should be further explained.
- Waste component and efficiency gains need to be included in analysis and discussion.
- Recycling of wood products should be included in life cycle analysis and should include regional differences in recycling.
- Per capita consumption of wood should also be included.

**Ideas for Consideration**

- Address sustainability in future as related to carbon; specifically, “What is impact of climate change on forests?”
- Effect of carbon due to wildlife and effects of fire on carbon budget (e.g., relationship to forest health).
- Expand research beyond forest timberlands (e.g., rangelands).

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

***Criterion 6: Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies***

**Overarching Comment**

This sort of workshop stimulates, in fact seeks, criticism. With all this criticism swirling about, the groups did not want lost the unanimous recognition that this report is a heroic effort and an impressive beginning.

**Key Themes**

- **Disaggregation of Data:** The groups recognized that this document is national in scope, but the feeling was that national data obscures socio-economic realities experienced in regions. There was a strong sense that there needs to be a disaggregation of data by local, state, and region, or at least a placeholder when data is not yet available – with an explanation about the general lack of or lack of quality information.
- **Terminology:** Several terms were seen as problematic and needed to be more clearly defined and used consistently across the criteria – such a wood products and forest dependent communities.
- **Investment in Forests:**
  - Definition of investment in forests needs to be expanded beyond wood and wood products to include a broader range of items (e.g., water and water quality, recreational activities, etc.)
  - Measures of educational investment need to be broadened to include community colleges, industry and non-profit training programs, among others, offering training in forest management and capacity-building.
  - Investments in local social capital needs to be counted.
- **Employment Data:** Employment data, as enumerated in this document, includes people employed in state and federal forest services and corporate timber workers. It does not count self-employed forest workers – micro enterprises and independent timber contractors – and the sense is that these folk are significant contributors and even growing in number.
- **Spiritual and Cultural Values Related to Forests -** Need to capture spiritual and cultural values of forests in a manner that is broader than just IUCN (International Union for the Conservation of Nature) protected categories. And this needs to include recognition of the spiritual and cultural values of traditional rural lifestyles and independent forest contractors.
- **Graphics:** The use of graphics to illustrate points was appreciated, but the group felt that more and better graphics were needed. They should be used in place of text, adding annotations to clarify when needed. Critical Point: Figures should be able to stand alone.

**Introduction**

- The rationale contained in the introduction does not seem complete.
- Describe specific historical points and paradigm shifts that affected the choice of specific indicators.
- The introduction to this section is not true. We don't need every biological

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

component. It needs to be more accurate in its descriptions and it needs to reflect the purpose and intent of report.

- It should provide an explanation for each suite of measures.

**Data – Presentation and Quality**

- The issue of disaggregation came up many, many times in every category discussed. Lack of disaggregation is seen as very problematic. This is a national report but should be a roll-up of local and regional data across the country. For example, one regional issue that has been collapsed and lost by going national is that treaty rights, from a landowner point of view, are different in different regions.
- Trends – Look at trends and be consistent in the way the data is collected over time. This will be more useful than snap shots in time. Forest health and harvest is cyclical and what's vibrant today may not be tomorrow.
- Presentation of the report – include matrices and summary tables. Matrices summarizing the key points for the indicators would be very helpful. They would provide more accessible evidence than general text (e.g., for non-wood products and Indicator 40. Not everyone will go to the Data Report)
- For each graphic provide the following information:
  - What is the data source (and admit if the data source insufficient)?
  - How do we know this information?
  - What are we going to do with the data? What is the purpose of collecting it?
  - Identify qualitative statements to go with each figure that provides an explanation of each figure; offer an explanation of what each graphic means in the context of report.
  - Why did we pick this data for each specific indicator?
  - What is the quality of this data; what are its current limitations?
- Graphics are great and should be included in the report. Consider removing some text and providing more and clearer graphics.
- Alaska skews the data. Report on it separately.
- Data is presented inconsistently (e.g., sometimes present data at aggregate national level and sometimes break out state, federal, etc.)

**Terminology**

- The term wood products is questionable. In the United States, wood products includes paper products, but internationally, wood products does not contain paper - rather forest products include paper products. Forest products would be more internationally consistent.
- Make terminology uniform or clarify the use of word choices.
- Include ecosystem services (e.g., water) in the report as part of forest products.
- Should include footnote on what types of wood products are included in miscellaneous products; what are the particulars?
- Make more specific what is included in the IUCN categories.
- Are we interchanging timberland and forestland? Should not. Clarify or footnote where necessary. Less valuable if use forestland. Timberland is a

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

subset of forestland.

- Need to clarify “connotation” of terms – specifically, protected forests.
- Indicator 31 – Internationally, “fuel wood” is consumed at home not by industry.

**Production & Consumption (Indicators 29-34)**

- Additional Indicator - 29-a: Number of permanent, full-time local jobs supported by local (same ‘local’) value-added processing.
- Additional Indicator - 30-a: Number of permanent, full-time local/regional jobs supported by value-added processing on non-wood forest products.
- Additional Indicator - 31-a: Total value of locally/regionally produced forest products, and resulting local/regional per capita income.
- Additional Indicator - Supply and consumption / use of non-wood forest products.
- Economic benefits of forests should also include broader range of items (e.g., water and water quality, drinking water, irrigation water, recreational activities).
- Consider including related industries as well (e.g., saw producers, chainsaws, fork lifts). How does indirect employment impact all economic considerations?
- Need to be explicit that data does not include illegal activities, such as production of marijuana.
- What about the impact of change in federal harvest levels? We’re moving from harvesting public lands to predominantly private.

**Recreation & Tourism (Indicators 35-37)**

- Are we considering the correct type of data for real understanding of conditions and impacts? What about investments in tourism outside of the forest itself (e.g., trails) – like tour guide equipment purchases, rental equipment for rock climbing, etc.
- May need to address on an individual basis each recreational activity; e.g., downhill skiing in the South is not a good measure, but on a regional basis, pleasure walking is fine for the South.
- There’s a statement in the report that  $\frac{3}{4}$  of NIPF lands are used for recreation, but the reality is that 100% of land is used for recreation. If it’s not by the owner’s choice, it is, nonetheless, used “in violation of trespass.”
- Make clear the difference between parks and sites.
- Page 41 – “site” visits: This is confusing. What’s the difference between visitors, occasions, visits, and visitor days?
- Need more clarification of per capita calculation.
- Camp site count is a significant undercounting. Many others offer such services who are not captured (e.g., state lands other than state forests, parks, BLM).
- Indicator 37 – We don’t learn much about forest uses and who really is visiting. Analysis is lacking.
- Figure 37 - 2 - typo: It says billions. It should say millions.
- Figure 37 - 1 & 2 – It’s unclear what is going on and whether the data are valid.
- Modified Indicator - 35/36 - Area and percent . . . general recreation use . . . number and type . . . general recreation use . . .
  - Free use & Fee use – report both 35 and 36 with free and fee distribution.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Again, this has to do with who benefits and who pays and, therefore, exactly what values/paradigm we are advocating. Are the national values the same as individual communities'?

**Investment in the Forest Sector (Indicators 38-41)**

- Huge, costly indicator to really address well. At least describe the scope and give real-life examples based on data we do have.
- Understanding that data is limited, we still need to find ways to bring whatever can be found to expand the measure of indicator 38 beyond timber and wood processing. It was noted that an emphasis on non-timber values is increasing, even where timber value is going down.
- We must find a way to address forest health issues.
- Explain in the text why these measures are appropriate for the Criterion.
- Need to expand the definition of investment in the forest sector.
- Additional Indicator - 38-a: Percent of investment that is held by people and organizations within the local/regional community.
- What about including foreign investment in the United States as well as United States investment in foreign countries? Both have implications for sustainability in the United States and other countries (e.g., Japan is very sustainable at home because they cut all their timber abroad).
- Table 38.7 - Capital investment of United States companies in foreign countries. Should that be included in the report or not?
- Indicator 38 – Where is the cost of environmental investments reflected?
- Indicator 39 – Are we double counting cooperative agreements with universities?
- Indicator 40 – What about mills? Consider measuring persons per million board feet as a reflection of new technologies in wood production.
- Indicator 40 is an extremely important indicator because this will make or break whether or not there are forests.
- Importance of including private land considerations in investment considerations.
- Need to acknowledge both formal and informal education. Describe the scope of education in indicator 40.
- Need to include foundation-funded research. This is not captured in university statistics.
- Indicator 41 – Shows whether keeping forest land in forest use will be viable. Include investments in other areas (recreation, etc.) as well.
- Indicator 41 - The number of agency employees is not very meaningful unless compared with acreage.
- Indicator 41 – IRR is problematic. Maybe break it out by federal, state, etc.
- Rate of return – Is an estimate value of standing stock a correct measure?
- Modified Indicator - Rates of return on investment:
  - Show the overall rate of return within a region or, even better, locally.
  - Show regional/local government “investments” and their rate of return (e.g., long-term average tax dollars per \$1 of tax breaks given to stimulate jobs).
- Investment graphics should be added. Particularly colored maps.
- Potential proxy – physical return on growing stock – both timber and other

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- forest products.
- Need to include measurements of investment in social capital and community development – not just improved capacity of forest officials.
- What about restoration? Is that included?
- Construe forest management more broadly than simply wood production. It’s much broader (e.g., improved road standards, alternative forest products that recognize community-based forests in United States)
- Consider “appropriate” technology (maybe not that term – outdated), particularly in the socioeconomic context; at least need to state why technology improvements were made, recognizing the trade-offs in doing so.

**Cultural and Spiritual Needs (Indicators 42-43)**

- Need to make sure that the United States is measuring and reporting information that is compatible with other countries.
- Do a “special places” gap analysis; “special places” desired, rather than forest land.
- Indicator 42 – Need examples rather than just using IUCN. The discussion is missing a lot because we are using a strict definition – management only. We are missing legal implications. What about protected/restricted lands? Look at this as well.
- Indicator 42 - Need a line for tribal lands, at least in the West. Look at forest research planning in Colorado for guidance.
- Indicator 42 – need to refer back to fuller explanation of Indicators 2 & 3 or refer the reader to the website for additional information.
- Additional Indicator - 42-a: Area and percent of forest lands on which issues relating to cultural, social and spiritual needs and values are being contested.
- BMP & SMZ need to be included in protected areas analysis; reality, as landowner, is that BMP & SMZ cannot be used for timber, so should be included in protected areas analysis – Captured as regulation easement (rather than conservation easement).
- Need to properly capture spiritual and cultural lands, not just IUCN categories.
- Place the quantity of spiritual and cultural lands in a context to create relevance for the reader.
- Discussion on cultural and spiritual should be broadened.
- Indicator 42 – Recognize the spiritual/cultural needs that are met on commercialized lands. Need to recognize traditional rural cultural values as well as the more indigenous and nature-based spiritual values.
- Indicator 42 – Indicator 42 is not accurately reflected based on data brought to bear on it. Needs to reflect on NIFP landowners.

**Employment and Community Needs (Indicators 44-47)**

- This indicator is simply a huge place holder for additional work that needs to be completed.
- The problem of a lack of community data cannot be understated. We suggest including side bars, case studies, etc. since we do not have information on community basis at this point. We have to figure out how to measure this because

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- is too important to bypass. Consider involving community development experts. Community Development Society is a place to get some of these folk.
- Forest dependent communities – need to recognize that several definitions for forest dependent communities exist. Need to acknowledge the definition established by law as well as other definitions.
  - Measurement of viability should be as a subset of forest dependent communities (or counties, right now) and not out of all communities.
  - The analysis uses forest cover as a measure rather than forest activity - which is the most appropriate? If we continue to use forest cover, then we need to acknowledge the shortcomings of the data.
  - We also need to consider mobile forest communities. This is an underserved work force that may not show up in forest dependent communities.
  - Indicator 44 - The data does not capture the full range of micro- and small business? Acknowledge that we can't capture these businesses thus far.
  - Indicator 46 – Zip codes would be more effective at capturing tribal and indigenous community information. Oregon, Washington, and California are moving towards this. Also, the traded sector strength is often available on a local scale.
  - Change “community stability” to “community vitality” or “community resilience.”
  - Criteria 47 – Should also include employees of other federal agencies, tribal forestry, tourism and recreation-employed people.
  - The map is actually quite misleading/perhaps even inaccurate.
  - Modified Indicator – 44 - Direct and indirect employment . . . Disaggregate this to the region and local level.
  - Modified Indicator – 45 - Major employment categories - “Categories” should include race, income-level, etc.
  - Additional Indicator - 47-a: Area and percent of forest lands on which rights to subsistence use are being contested.
  - Proxies for resiliency are not effective. Work with community-development specialists to develop better ones. Measurements of social capital, for one, would be more helpful (read Robert Putnam – Bowling Alone. Ask him to help! He’s a professor at Harvard. He would be very responsive.) Social capital plays a significant role in creating resiliency. As he’ll tell you – measure group/club membership.

***Criterion 7: Legal, institutional and economic framework for forest conservation and sustainable management***

**General Comments**

**Needed Additions**

- Quantify aspects of indicators, such as number of states or entities that require public participation or have a certification process.
- This chapter would benefit from sidebars to bring life to concepts, especially to illustrate trends or controversial issues that need more discussion.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Include more concrete examples, precedents, etc. Include information on who is doing what.
- Use graphs and charts to replace some text. They would make the report more readable and would add meaning.
- Highlight trends. Statistics without a trend are difficult to understand. Problems cannot be fixed unless they are identified and people know about them. Trends will help suggest needed future actions. If data is not available for trends, compare it to other industries or land uses or other sectors.
- Go beyond national scale and include more regional and local data. What are other states doing? It would help states know where they stand compared to other states.
- Capture implications of comprehensive land use planning, as they could have a major impact on forest sustainability. For example, Oregon has maintained its forest base through comprehensive land use planning including forestry, agriculture, and urban. Where is it in the report? Possibly include in analysis for indicator 49 or indicator 54.
- Communities of place need to be taken into account. Develop sub-indicators that address the human component (communities, tribes, rural, urban).
- Besides communities of place, there are communities of interest (like harvesters). Policies can have an impact on both environment and society. Provide for public involvement – this report is missing certain populations.

**Issues Needing Clarification**

- Some terminology needs to be clarified. Clarify difference between sustainability, sustainable forest management, and sustainable forestry. These terms are not the same.
- Clarify definition of timberland vs. forestland.
- The United States does not have national forest programs with fixed goals.

**Structure/Presentation-Criterion 7**

- These are complex concepts and need to be explained. Don't limit length of report if points are not made. The level of detail for this criterion needs to be more extensive, even if it makes the report longer.
- Disconnect exists between the data report and the data summary. Have the indicator author write summary or closely review/rewrite summary.
- Use a consistent format and similar approach for all indicators. Other criteria included more data in their summaries. Criterion 7 should have less narrative and more data. Perhaps move some of the narrative to Chapter 4.
- Make data details accessible – do not hide them all in the technical report.
- Make sure to incorporate into the report the organizing framework that Calder Hibbard presented at the start of the session (re: process, challenges, etc.).
- Emphasize the use of the term “capacity” in assessing these indicators.
- Criterion 7 makes good use of creative data – other criteria could be more creative in the data collected and used, specifically water and soil.

## **Review Workshop – National Report on Sustainable Forests Portland, Oregon April 30 – May 2, 2002**

### **Structure/Presentation - Full Report**

- The Birch Report on NIPFs is a useful model. The initial section is 100 pages and then has longer reference sections later in the report without having to refer to another publication. Include some data as appendices.
- One hundred pages is a usable length and is a realistic goal. Having the technical information in a separate report works well. If it gets too large, some may not read it.
- If you have an executive summary, it needs to be brief (two pages not 40). It should include the purpose of the report, the intended use, and caveats (about what it is and is not).

### **Use/Applications**

- Report has good use for grad students for their thesis. Data needs to be easy to access and download. It is currently not in a format for private forest landowners.
- Use is at different scales and varies based on scale. The indicators are designed for national and regional landscape analysis, not effective at the local or small scale.
- Make the report easier for workshop participants to access – unless you have a fast-speed connection, the report was very difficult to download. Having it in one file would be easier than having to download separate chapters.

### **Interpretation**

- Illustrate what is sustainable and why it is sustainable in the United States and other countries.
- Chapter 2 should be limited for now to “what is” rather than “what ought to be.”
- Need to do a better job of analyzing the data for use in the future. Not much data exists but there is some useful analysis on what does exist.
- Make sure we get to the “So What?” question – either in this chapter or Chapter 4.
- Include more interpretation in the analysis of the indicators.
- Tension exists between chapters 2 and 4. Chapter 2 needs to do some interpretation as data is presented.
- Keep backbone of sustainability in mind with each indicator. Look holistically at Criterion 7 and use whole system accounting.
- Identify where we are in the process. We are creating a national template of what is at the national level.

### **Chapter 5/Future Action Considerations**

- Put in place reporting systems to identify trends.
- Not all indicators are equal nor should they receive the same amount of attention. Clarify which indicators have the highest utility. We need to determine priorities.
- There are parts of the data that we don't know much about. Before we determine priorities, we need to collect data on those indicators missing data.
- As we identify priorities, we need to connect with the Montreal process.
- All indicators, but particularly the legal and institutional indicators, need to take into account the human component that promotes a sustainable forest.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- We need to move towards using the C&I as an organizing framework – this would help feds, states, and regions collect the necessary data, and do monitoring and assessment.
- Incorporate “communities of interest” and “communities of place” into indicator 48 if/when this indicator gets revised.
- Public involvement opportunities exist, but are not adequate in terms of reaching certain groups. Future needs to involve monitoring, altering involvement structure, etc.
- Make this report easily accessible and readily available to the public.
- More emphasis needs to be placed on enforcement costs vs. voluntary compliance.
- Future forest-related planning and assessment (indicators 49 and 54): promote an all-party monitoring approach to help define methodologies and data collection. Interest groups could help define monitoring and data collection methods. The more groups involved, the more balanced a picture you get. The analysis for these indicators should explicitly state that participation is often not valued.

**Miscellaneous Comments**

- It would be useful for this report to include some discussion about how our actions in the United States affect other countries.
- The rationale statement for each indicator is very helpful. Trends and major findings are also helpful.

**Comments on Specific Indicators and Indicator Groupings**

**Legal Framework (48-52)**

- Include the regulatory framework/context within the legal code (e.g., administrative policies).
- Answers will vary based on ownership categories. Break out by ownership categories in the analysis section of each indicator.
- The analysis is very general, with few concrete answers. Give specific examples where they exist. Identify some of the gaps and include in the analysis.
- The analysis should reflect the fact that the legal and regulatory framework has an increasing amount of requirements that landowners have to work with and which are forcing smaller landowners out of timber markets and out of forestland ownership.

**Indicator 48 – Clarifies property rights, provides for appropriate land tenure arrangements, recognizes customary and traditional rights of indigenous people, and provides means of resolving property disputes by due process.**

- Include tribal governments. On the bottom of page 47, wherever government is mentioned include tribal so that it does not look as if they are excluded.
- Include more discussion on the federal relationship with tribes – that may be of interest to other countries.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Last paragraph states that there is a wealth of information for land tenure and property rights, yet the understanding is unclear. Why? This is contradictory. Give examples where it is clear.
- Break into scale and group (e.g., tribal).
- Lots of uncertainty. Clarify property rights. Identify questions to help understand how SFM is tied to property rights.
- Discuss the shifting perception of property rights over time, especially access.
- Tease out conflicts between federal, state, and local laws and regulations.

**Indicator 49 – Provides for periodic forest-related planning, assessment, and policy review that recognizes the range of forest values, including coordination with relevant sectors.**

- Analysis needs to reflect small landowner values. Many small woodland owners have values that are not normally reflected in the marketplace, and these values are not compatible with the process. Surveys are general and done infrequently. Small landowners do not have access to current planning opportunities. These landowners are source of 60% homegrown wood supply.
- Use American Planning Association's compilation of state planning statutes and regulations.
- Include the emerging role of communities.

**Indicator 50 – Provides opportunities for public participation in public policy and decision making related to forests and public access to information.**

- Participant participation does not mean that it does what it ought to do. Look at what groups have been excluded from the process.
- Implies that public participation is only for public land. Public participates in private land through legislation.
- Highlight dilemma in the western United States – there are lots of efforts towards collaboration that often get stifled by national command and control policies. Our public participation policies do not allow for local collaborative efforts.
- Track how effective these opportunities are in reaching the affected public – they are not reaching all audiences.

**Indicator 51 – Encourages best practice codes for forest management**

- Mention endangered species act and its impact on state forestry codes.
- Include more information about BMPs/codes. Which states have them? Where are they working? Where are they monitored? How much land is affected? How effective are they? Which states have voluntary BMPs and which have regulatory?
- Data on state regulations needs rigorous analysis.
- Clarify what practices this indicator refers to – they seem to be mostly technical, as opposed to social or administrative.
- Include certification as a non-regulatory way of creating incentives for SFM

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- When mentioning certification, don't just mention SFI – also include the Forest Stewardship Council, Tree Farm, and ISO 2000. If you are going to mention one, mention them all. FSC has principles that are accepted globally.
- This whole section, not just the discussion on BMPs, should include the distinction between regulatory and voluntary codes. There is lots of diversity among programs.

**Indicator 52 – Provides for the management of forests to conserve special environmental, cultural, social, and/or scientific values.**

- Should include non-traditional values, especially community-based and non-biological values.
- Discussion of local and state government is too forest-centric and forest-based. The analysis needs more expansive thinking as expressed in law and action, and should include other relevant laws like land use planning and open space laws.
- The processes in place to protect these values are problematic. Administrative processes are sometimes counter-productive. Cite unique examples, such as the Washington DNR sale of development rights of state land (Loomis State Forest).

**Institutional framework (Indicators 53-57)**

**Indicator 53 – Provide for public involvement activities and public education, awareness and extension programs, and make available forest related information.**

- Mention that, at the ground level, these processes do not have a user-friendly structure. It's not enough to say that there are access points, if they are not effective for all groups.
- Consider where education information is being made available and where it is not – where are there gaps?
- Lot of information available, but go the next step and summarize what information is available and cited in the data report.
- Be more specific about the institutions – how does participation vary by ownership type?

**Indicator 54 – Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sect oral planning and coordination.**

- Does this assume that these processes are inter-agency? Will input be solicited? Clarify to whom the indicator pertains.

**Indicator 55 – Develop and maintain human resource skills across relevant disciplines.**

- Rationale should cover more than just formal institutional positions, and should extend to less formal institutions, like mushroom harvesters. Reflect movement to give training to tree planters.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The rationale is very institutionally oriented, and there is a lot of local/community knowledge and skills that need to be addressed. The National Network of Forest Practitioners might be able to add information.

**Indicator 56 – Develop and maintain efficient physical infrastructure to facilitate the supply of forest products and services and support forest management.**

- Include more regional information. Reflect trend in interior west re: losing infrastructure to process wood products.
- Don't just look at how much exists, track flows within system that identifies directions, trends, and dynamics. Look at where materials are coming from (within the United States or outside?).

**Indicator 57 – Enforce laws, regulations and guidelines.**

- Look at what does **not** occur as well as what does occur (e.g., lack of enforcement of ESA, Clean Water Act TMDLs, etc.).
- Include full time equivalent (FTE) numbers for enforcement of laws to assess capacity.
- Include information on the actual cost of agency monitoring and enforcement of regulations versus cost of voluntary compliance.
- Include the actual success/compliance rates on voluntary versus regulatory (Fred Cubbage has done this study in North Carolina – this needs to be studied at the state level in more states).
- SFRA might add to this analysis, perhaps as a sidebar.

**Economic Framework ( Indicators 58-59)**

**Indicator 58 – Investment and taxation policies and a regulatory environment which recognizes the long-term nature of investments and permit the flow of capital in and out of the forest sector in response to market signals, non-market economic valuation, and public policy decisions in order to meet long-term demands for forest products and services.**

- Long-term nature is critical. If we can adequately assess that, the other indicators will fall into place. We lose context over time relative to where we have come from.
- Analysis addresses taxation but not regulatory environment and its implications. West has experienced mill closures due to regulation and this has affected the infrastructure and capacity of the region.
- Many ideas are included here. Perhaps break into sub-indicators so ideas are not lost. For example, look at infrastructure and distribution.

**Indicator 59 – Non-discriminatory trade policies for forest products.**

- Information on truly “free” trade needs to be captured. Discriminatory trade policies exist. The analysis needs a brief history of trade, where it is going, basics of free trade. Foreign countries have green certification protocols but are they being followed?

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- There are conflicting issues regarding trade. Trade liberalization can have positive and negative impacts. Certification might be considered a “negative” within the context of this indicator.
- Within the rationale, 3<sup>rd</sup> sentence, it should state, “Policies should not provide false market signals...” Market reality will come to bear and needs to be addressed.

**Capacity (Indicators 60-62)**

- Summarize trends in market capacity, especially where that capacity is going offshore.
- Highlight regional trends in the United States in capacity and loss of processing. For example, the Northwest likes to manage on longer rotations, but it has become harder to do this because of mill closures and processing trends. Timber has to go a longer distance to be processed and adds costs for the landowners.
- Highlight import and export trends relative to regulations
- Break out information by forest types, size class, etc.

**Indicator 60 – Availability and extent of up-to-date data, statistic, and other information important to measuring or describing indicators associated with criteria 1-7.**

- Analyze social and economic indicators by zip code, rather than county.

**Indicator 61 – Scope, frequency, and statistical reliability of forest inventories, assessments, monitoring and other relevant information.**

- No comments.

**Indicator 62**

- If there are any protocols or data standards between countries (e.g., United States and Canada on noxious weeds controls), show those examples. Stress the positive, if there is any.

**Research (Indicators 63-67)**

- The definition of research is limited. It appears to be traditional and institutional in nature. It should include community-based research and participatory research, or at least acknowledge their existence and the need to collect data on it.
- Look at appropriations to research, and include a trend line of dollars spent on R&D.
- Incorporate the investment side of R&D from Criterion 6 with the capacity side in Criterion 7. Cross-reference between Criteria 6 and 7 in their respective sections.

**Indicator 63 – Development of scientific understanding of forest ecosystem characteristics and functions.**

- Include capacity of EPA. If that data cannot be found, that gap should be noted.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Indicator 64 – Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest related depletion or replenishment in national accounting systems.**

- For environmental accounting, think about where you can leverage efforts.
- Mention the idea of evaluating state projects for environmental cost.
- This accounting needs to get beyond national into regional and state level.
- Highlight examples (in a table) of analysis of valuation methods.
- Highlight unfunded environmental mandates (e.g., study conducted by Bureau of Indian Affairs).
- Address whether the methodologies are being incorporated into decision-making. Is this happening at the different levels of government, agencies, and stakeholder groups?

**Indicators 65–67**

No specific comments.

**Chapter 3 – Current Actions in the United States**

**General Feedback**

- Many participants did not understand the purpose of Chapter 3 or found it confusing and difficult to select or recommend the examples that should be included in the chapter.
- Others who understood the purpose expressed frustration with the content and the stage of development of the Chapter, but supported its inclusion in the report. One group suggested that the chapter should be included but be placed after Chapter 4 rather than before.
- One group expressed concern with the perception of promotion and questioned whether the intended content should be included as a chapter. This group suggested the possibility that the compilation of current actions should be more inclusive and included in an appendix as a compendium.
- I don't understand this – I'm confused – I'm frustrated.
- Participants were generally frustrated at the state of the chapter because information was not presented in a consistent manner, web site descriptions were mostly 'mission statements' and did not necessarily correlate to, or even mention, the project for which the group was included in the report.
- Consider omitting Chapter 3 due to the concern about the perception of 'endorsement' and leaving examples out.
- Make Chapter 3 an appendix of an extensive listing of examples.
- 'Kill' Chapter 3 as it stands because of the concern about endorsement.
- Mission statements are not helpful in informing readers about what the groups have done or are doing related to sustainable forest management.
- What do we want to accomplish? It looks like we're trying to create some directory. What I think we're actually trying to create are some examples of community actions.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- There's no such thing as value-neutral.
- Sustainable management is what happens on the ground. That's what needs to come across. Comes across as lots of discussions, process, bureaucracy.
- This Chapter is in the wrong place – we're recognizing groups before we've interpreted the information. Should be after Chapter 4. (Sequence of chapters: what does it mean, how do you measure it, how do you interpret what you measure, what does the result look like, what can help you get there, where do we go from here).
- Chapter three does not belong in the report because it is timeless. It should be a separate document or appendix of the report.
- Everyone can use the report by removing chapter three. The remaining chapters present the facts and set the stage for policy decisions, behavior change, and developing different techniques used on the ground.
- The contents of Chapter 3 have a likelihood of being seen as promotional and for that reason, quite controversial. At the same time, the intent of the chapter is key and should be addressed in some way.
- It is important and valuable to have this chapter, since it shows actions (especially non-government actions), which is critical.

**Criteria for Inclusion**

- The chapter should be very clear up front, preferably in the introduction, about the criteria used to choose examples (e.g., do all examples touch on the three legs of sustainability?)
- Authors should choose organizations that are less known in order to raise their visibility, but they should not ignore organizations that have done significant activities either.
- The authors should strive for diversity in their examples.
- Clarify the criteria for the sideboards, e.g., what are the criteria for selecting the stakeholders.
- Provide more information about the examples and the criteria for selecting the examples. It is difficult to recommend examples because there is limited information about each program.
  - Authors should choose organizations that are less known in order to raise their visibility, but they should not ignore organizations that have done significant activities either.
  - The authors should strive for diversity in their examples.
- The process for selecting the groups ('the Delphi process') may have prevented selection panelists from influencing one another but it still appeared to leave the selection criteria up to the subjective process of each Delphi participant. The group felt that a solid, objective and consistent set of selection criteria should be developed and employed in order to choose the final list. Some felt that unless this was done, the chapter should not be included at all. It was also not clear who would initiate or make the final selection criteria and on what basis.
- There was high frustration by the group in being asked to evaluate so many projects without any input on the actual projects or a set of ranking criteria. Several participants commented that one would have to already be well familiar

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- with the project in order to recommend it for inclusion in the chapter so they were only able to fill out the workshop form based on groups they already knew.
- Each group should be sent a detailed survey to fill out which can be used to objectively compare and evaluate projects for inclusion in the chapter as well as having consistent data to plug into a master web-based project database. The survey should also ask the group being considered to describe why they are ‘compelling’ since this information is not now provided in the chapter. (One participant noted that her description was not at all accurate and was pulled from a colleague’s web site. She felt this brought into question the other group’s written descriptions.)
  - It would be interesting and more holistic to include groups that manage and affect multiple ecosystems such as a watershed group that includes sustainable forest management in its goals and projects. Ensure that the linkage with other systems is clear since ‘forests’ are not an isolated resource and they are somewhat transitory (e.g. land conversion from forest to mall).
  - Ensure that the projects selected represent adequate geographic diversity and size of group.
  - Examples listed should have some/all of the following characteristics:
    - Directly, positively impacting forest management – leading toward sustainability.
    - Long-term participation.
    - Monitoring component (assessment).
    - Broad-based participation.
    - Far-reaching effects.
    - Effect on a significant amount of land
    - Collaborative partnerships – i.e., Great Lakes Forest Alliance.
    - Interdisciplinary approach.
    - Resulted in changes to laws or regulations.
  - One critical criterion should be that examples meet all three components of sustainable forest management - economic, environmental, and social health. They should also demonstrate on-the-ground results.
  - Develop some categories and then identify case studies. Examples: problem-solvers, challengers, land-owner assistance, etc.
  - Create clear selection criteria:
    - The ones that exemplify all three legs - economic, environment, and social.
    - How does it meet our goals now and how will it meet them in the future,
    - On the ground/action.
    - Breadth of diversity of action.
    - Practicing sustainable forest management.
    - Moving in the direction of achieving sustainability goal.
  - Groups that are selected need to be more than doing a process – need to practice on-the-ground applications.
  - Perhaps a few shining stars that are only emergent, but unique, should be included. Maybe not quite all need to be done deals.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Must be able to demonstrate that they are moving in the direction of the sustainability goal. This will lead us back to the C & I.
- Partnerships should be highlighted – partnership component of this effort is important.
- What about taking a new approach: Instead of trying to find a big list of organizations that are slightly going there, how about create the context for a target and challenge all organizations to demonstrate how they would work towards achieving all three legs (economic, environment, and social) simultaneously.
- Send out an invitation to each of the groups identified and ask them to make the case as to how they're meeting the three legs and why they should be included.
- Several groups suggested that the criteria for selecting the examples be clearly stated. Some of the suggested criteria include:
  - Geographic diversity.
  - Interest group/values diversity.
  - Different scales.
  - Innovative new approaches as well as efforts that have been around for awhile.
- The categorization scheme needs to match the selection criteria and needs to be used to organize the presentation of the information. Some groups suggested that some statistics should be used to describe the full breadth of activities/ organizations contributing to the effort for each category (e.g., number of consulting foresters). Another group suggested the categorization scheme should be organized around functional areas such as on-the-ground efforts, policy-oriented efforts, research efforts, etc.
- Another group suggested that the groups being considered for inclusion should be contacted and asked to explain how they think they meet the selection criteria for being included in the report. Another group felt the detailed description should be gathered after the efforts have been selected for inclusion.
- Examples included in the chapter should exemplify the breadth and depth of efforts being undertaken, including noteworthy efforts made by individuals, collaborative efforts, and innovative approaches.
- Groups that demonstrate, or are best at balancing social, environment, and economic, are the ones that should get in. How do the examples measure up against these three?
- Several groups suggested that the examples should give primary emphasis to “on-the-ground” activities.
- Two groups suggested that the examples all need to show a clear link to SFM and to the C&I, and should include a clear statement about the effectiveness and/or outcomes of the action.
- One group went so far as to suggest the chapter should only include examples of actions that are working on or are attempting to integrate the three pillars of SFM.
- Examples of United States work with other nations and urban forestry should also be included.
- There is a need for defensible criteria for why examples are included.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Many projects in the chapter could be described as ‘education and outreach, research or information sharing.’ While some of these are good to include, participants felt that the emphasis should be for ‘on the ground projects’ where a direct link could be made between the group’s actions and sustainable forest management. Innovative and effective projects should be highlighted. For example, highlight a project that employs new silviculture practices designed to improve forest wildlife habitat.
- Establish guidelines and criteria for how examples will be selected for the final report.
- Prioritize groups. The more important ones should be included in chapter.

**Examples Suggested for Inclusion**

- Under associations and societies, include other types of organizations like the Society of Natural Resources Associations.
- On page 8, the National Network of Forest Practitioners is an organization of other organizations versus an organization of individuals that represent a diversity of races, cultures and sustainable forest activities.
- The National Woodland Owners Association should be included because it is the largest independent organization that includes 32 affiliated state landowner associations.
- The National Council on Science for Sustainable Forestry (NCSSF) is a key example of an organization that should be included in this report. They are asking key questions that have, to date, not been highlighted in the dialogue on SFM regarding the science to support the dialogue.
- *Wallowa County Initiative*: Specifically, the Blue Mountain Demonstration Area
- *State of Oregon*: As state leader for Sustainable Development
- *The Nature Conservancy* (not just Forest Bank Program): Good development of partnerships, general preservation of high value conservation areas.
- *The Forest Stewardship Council*: Good use of all three legs of sustainable development, stakeholder involvement in membership, regional guidelines, and striving for balance in Principles and Criteria.
- *Collins Pine*: Industrial leader in sustainable forest management that illustrates the benefits of family owned company.
- *American Tree Farm*: Strong outreach to NIPF, education, empowering landowners, advocating sustainable forestry to public and legislators, raising standards, and helping landowners maintain their forests.
- *Northern Forest Alliance*: Regional efforts across states and working with the economies of communities.
- *Pinchot Institute*: Identifies emerging policy issues, brings together stakeholders, suggests approaches for dealing with those issues (e.g., role of plantations)
- *Healthy Forests, Healthy Communities*: New innovators, working on all three dimensions of sustainable forest management.
- *Four Corners Sustainable Forest Partnership*: Great example of partnership, especially with local Forest Service.
- *International Forest Industry Roundtable*: Good example of United States working with other nations.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- *National Agroforestry Center*: Illustrates linkages between forestry, agriculture and other natural resource sectors.
- All Biotic Taxa Inventory at Great Smokey Mountains National Park.
- State initiatives from other regions besides the west (particularly the northeast and the Midwest).
- Long-term Ecological Research Centers in Baltimore and in Phoenix.
- Land trusts besides The Nature Conservancy, particularly those in the northeast that involves working easements and have a monitoring component.
- Other examples of domestic/international cooperation/collaboration.
- Organizations that are doing monitoring.
- Total Maximum Daily Load-spurred activity.
- Types of activities/groups/organizations/initiatives that should be included in the report include:
  - Certification systems
  - Environmental groups working on sustainable forestry
  - Initiatives that have implemented projects with far-reaching effects, or that have the potential to do so (watershed initiatives)
  - Watershed groups/councils
  - Native plant societies
  - Medicinal groups
  - Assessments – Columbia River Basin
  - BMPs
  - Forest stewardship programs
  - Forestry Extension programs
  - State & private forestry stewardship assistance
  - National monitoring programs
  - Stewardship contracting
  - Better utilization of small material – ie. mill conversions
  - Research groups – universities, private consultants, co-ops, Forest Service
  - Research groups involved in forest ecosystems.
  - U.S. Fish and Wildlife
  - Forest & Fish Agreement in WA – led to changes in Forest Act, could lead to changes in ESA, changes in sustainability related to aquatic systems
  - Progress made on recycling in recent years
  - Quincy Library Group
  - Great Lakes Forest Alliance
  - National Fire Plan
  - Federal Laws (ESA, Clean Water Act)
  - Consider including individuals
  - More examples of individual tree selection rather than industrial model (Rick Fletcher, Menominee, Collins-Pine, Dick Smith-Yamhill County, Walton Smith-N.C.).

**Further comments on Examples**

- Descriptions of examples should cover:

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Explanation of what the group did (project, activity).
  - How long they've been doing it.
  - How much forest area was impacted.
  - Group's effectiveness/influence.
- Many of the examples contained in chapter 3 are very similar.
  - It is difficult to recommend specific examples for inclusion in the final report because there is limited information about each program in this draft of the report. Recommendations are also difficult because workshop participants only have knowledge of a few examples.
  - Illustrate in the rationale for including examples more clearly in the report (e.g., in support of other related activities that contribute to SFM).
  - Consider describing the diversity of examples in the United States instead of listing a selection of examples.
  - Leave out state and federal examples, and focus on tribal, 'community of place' and 'community of interest examples'.
  - Information on the examples should include a description of how they work toward SFM in addition to the organizations goals and objectives.
  - Examples reflect groups that are concerned with forest management. The goal was to get groups that are making a difference on the ground with regard to sustainable forest management and improving forest condition.
  - Ask Forest supervisors & state foresters to submit examples to be considered for inclusion in the Report, or in the comprehensive list.

**Comments Regarding Number of Examples**

- One group felt that the examples should be fewer in number (e.g., 10 rather than more) and should include more of a case study approach rather than brief one-paragraph vignettes. Another group felt that only including 10 examples is not sufficient and suggested 20.
- It will be difficult to reduce the number of projects presented to a number as few as 10. Whatever number of examples is presented, the projects should be diverse and broadly representative.
- There is concern about reducing the number of examples because the process and those examples selected may be viewed as endorsement of the examples.
- Consider as an alternative, selecting 10 'realms' (e.g., research, community forestry, etc.) of activity under which examples may be used and reference is made to an exhaustive list (e.g., the list might be utilized like the expanded data reports referenced in Chapter 2).
- Possibly include more than 10 examples. The number 20 was suggested.

**Support for Appendix/Database of Examples**

- Chapter 3 should be qualitative and include a discussion on the groups working to achieve sustainable forest management and how they relate to each other. Categories would be described but 'names would not be named.' This might be done using 3 or more broad categories such as government, community of place, and community of interests. This discussion would be coupled with an extensive appendix or expanded database of examples – open and inclusive database.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- All the groups that were considered should be listed at a central location (e.g. searchable web database) and this should be widely publicized and available to anyone.

**Presentation of the Information**

- Additional explanation is needed to explain what the sideboards presented on page 3 are and how they were selected.
- Project descriptions should include links to sustainability and C&I, effectiveness of the organization, outcomes (e.g. on the ground action), interpretations, and future actions. All the information should be presented in a consistent manner.
- It would be useful to develop a matrix/table to help evaluate the examples (e.g., depict instruments used by the organization to implement sustainable forest management against geographic regions).
- Depicting organizations and examples in a paper report is limiting. The list of organizations and examples could be more expansive as a searchable website. Also, this website could be used as a clearinghouse for future examples.
- There needs to be more rationale for the order of listing examples in the chapter (e.g., listed alphabetically). The list contained in the beginning of the chapter does not match the ordering of the examples in the text.
- One useful categorization of examples might be according to national impact, regional impact, and community impact as well as according to whether examples are government and non-government.
- Another method of categorization might be by social, ecological, economic, and those that integrate all three.
- The rationale for the groupings was not inherently obvious and some categories did not have any groups listed at all.
- Projects in the report should be grouped by functions they are fulfilling and should be reported on through short ‘vignettes’ that tell their story and how they are achieving the particular functions.
- Have photos of various projects to break up the text and depict projects, (especially ‘before and after’ photos with good visuals).
- The report should include for every project included, a fact-based description of the group’s work, how it relates to sustainable forest management and why/how they are successful.
- The length of the project should be included and there should be a range of ages of projects presented (e.g. those projects that have been on-going for many years with a demonstrated track record as well as new initiatives).
- In addition to short listings (e.g. a paragraph for each), participants also wanted to include some of the detail and richness to really describe a project including its goals, objectives, history, outcomes etc. A one-page case study for each of several key projects could help achieve this.
- There should be a historical context where appropriate, e.g., The X project is linked to the American Tree Farm system which was formed in Y year to achieve Z. This will help the reader have a better context for when and how these projects arose.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Many of the projects could be linked to indicators found under Criterion 7 and some under Criterion 6. It would be useful to describe these links where they exist, as this would make this chapter more relevant to the Report in general.
- It would be useful to report on the increase in funding for these efforts. The increase in Foundation interest and support for sustainable forest management was noted as an example.
- Add the comprehensive list of all organizations identified as an appendix to the Report. This list may need to go on website due to potential size (i.e., many universities have forestry schools/affiliations/involvement). Make reference to this website in the report.
- Reorganize the listing of possible groups so that policy makers are separated from on-the-ground forest managers, for example. Another suggestion was to organize by state and within states by function.
- Preserve the breadth and scope of such activities in the United States by showing the magnitude of examples in text or by listing projects in a concise form.

**Suggestions for Improving the Chapter**

- If the USDA Forest Service includes Chapter 3 in the National Report, the character of the chapter should be qualitative and not include reference to specific examples of current actions. It should discuss how diverse groups are working to achieve sustainable forests and how the groups might inter-relate. The discussion could be illuminated other current actions by using examples in three or more broad categories of activity (e.g., government, community of plan, and community of interests), and by referencing an appendix which would include a comprehensive listing of specific examples.
- Many of the initiatives listed in Chapter 3 should really be part of the databank that is reflected in Chapter 2 (e.g., acres conserved by TNC).
- Authors need to be clear about how they determine what to highlight within a category (i.e., forest management certification).
- Make this chapter more contribution-focused: contributions towards sustainability – monitoring, problem-solving, etc.
- How were these two tree woodlot owners selected among all the hundreds? Explain that they were tree farmers of the year.
- The section says non-forest products. It should be non-TIMBER forest products. Also, the groups aren't appropriate for this section.
- Way it's written is a self-report. Frame why they deserve to be in there and how they're accomplishing those objectives. Add value to the self-reporting to enhance the readers' understanding.
- Several certification schemes have been developed – all 4 should be listed.
- This isn't an honor roll – it's a way to inspire and give ideas.
- There is a need for an additional category for 'other forest products', such as nurseries, botanicals, and non-timber products.
- Explain what is meant by non-governmental organizations – e.g., categories by type as well as geographic scope.
- Establish a category of 'Resource Professionals'.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Several groups (perhaps all) expressed support for information to be collected on a very large number of efforts and be disseminated as part of a website / clearinghouse function associate with the report, if not included in the report – rather a “Data Volume” on current actions.
- A historical context for the projects should be provides along with a discussion of some of the key trends or change drivers leading to their formation. One participant noted the importance of explaining, for example, that there has been an increase in community-based forest groups and ‘why’ that is so.

**Forest Service Programs**

- How should Forest Service programs be highlight in this chapter?
  - Should this chapter include programs that are standard operating procedure (i.e., Forest Service’s Economic Action Program or Forest Service’s Forest Stewardship Program), rather than new initiatives? Or should these programs be part of the datasets in chapter 2? Or both?
  - The Forest Service is a great example of an organization that has adopted and moved towards sustainable forest management and its programs should be highlighted somewhere in the report.
  - Forest Service should be striving for integration among divisions, so that the whole agency is an example of sustainability, rather than just a few programs.

**Additional Comments**

- Shouldn’t there be some balance in this chapter, such as consideration of trends and ‘efforts’ that are moving us away from sustainability? Examples include:
  - Some timber companies use of increasingly short timber rotations.
  - Conversion of southeastern forests to plantations.
  - Conversion of forests to development.
  - Declining recycling rates.
  - Increasing consumer demand for wood products – perhaps beyond ‘sustainable’ levels.

**Chapter 4 – Interpreting the Information**

**General Comments**

- Some felt that the USFS has a leadership responsibility to provide some explanation on what the data mean. This could be done in a way that talks about divergent opinions on this constructively without taking a position.
- What do we mean by ‘what does the report mean?’ How far do we go with interpretation?
  - It depends on what we want to accomplish (e.g., report on data or report on the data and what the data mean.
  - Does the meaning include some comparison between national and regional information?

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- How far we go depends on the goal of the report (e.g., to have a dialogue or to say ‘where we are at?’)
- Chapter 4 as it is currently written is not helpful because it simply repeats information contained in earlier chapters.
- Chapter needs to be non-judgmental and objective in interpretation (example on page 5). The chapter should objectively report the status of C&I.
- The chapter should explain how indicators are designed to be applied, e.g., they are designed to help in raising questions, the implications of which are open to interpretation.
- Several participants suggested that the chapter should avoid policy discussions and should not attempt to draw conclusions or apply standards but rather should explain what can we learn from the indicators, e.g. trends and their directions up or down or stable (one example is the sustainable development indicators model). One participant noted that pages 4-7 go ‘too far’ in promoting specific policies and value judgments, especially those related to protected areas and plantations.
- The report should show how indicators reveal ideas about policy changes that may need to be examined or changed.
- The chapter should clearly state what we don’t know and why as well as directing report users to Chapter 5 for options on resolving those gaps.
- Seek to work in parallel and in coordination with existing, on-going processes such as the Northeastern states initiative.
- Consider whether and how we could change the indicators to make them more relevant and useful.
- Process to use: Look at what we have. Look at gaps and redundancies. What other indicators are missing? What can we conclude based on the indicators provided? Do this before we consider adding others. We may be making it more complex an effort than it needs to be. If we find one that we’re queasy about, then do the analysis and interpretation about that one. We have what we need to evaluate the criteria. How much more time do we want to spend on this?
- Try interpreting C&I in all ways.
- Some people believe there shouldn’t be interpretation. Leave interpretation to readers.

**Criteria Level Summaries**

- All groups supported the inclusion of criteria level summaries in the report but had different ideas about whether they should be included in Chapter 2 or 4. One group discussed the possibility of using disciplinary experts to produce the criteria level summaries.
- Building on the support for criteria level summaries, one participant suggested that not only is there enough data to do this, but an effort should be made to determine which indicators might not be needed to produce such summaries in the future.
- There should be a summary interpretation of the indicators. Some of the suggestions for the summary are:
  - The goals and purpose of the interpretation should be clear; e.g. the purpose of the summary is to highlight significant national trends based on

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- the data, such as consumption patterns, late successional preserves and IUCN categories.
- The summary should not be indicator by indicator (there are too many summaries already).
- Graphics would be helpful (e.g., maps or graphs of some of the key variables such as cost/acre of land possibly overlapping with a map of productivity or a map of fragmentation over parcelization).
- Maps demonstrating land use changes across the United States.
- There should be a criteria summary. It is not clear whether it should be in Chapter 2 or Chapter 4.
- Summary of each criterion should be contained in Chapter 2 and Chapter 4 should provide an overview and general statements of what process did and did not show.
- The group suggested having Criterion level summaries which would link the indicators and paint the ‘big picture. They noted Oregon’s First Approximation Report provides a good model of this as well as nice graphics to help interpret the information.
- This chapter needs criteria summaries that discuss the interrelationship between indicators as well as the criteria.
- A summary at the criteria level is needed. In Chapter 4, we need to lay some ground work for how interpretation could be done. Some of the big gaps are troubling.
- Summarizing and synthesizing has to take place at the criteria level, including inter-relations. For now, we should lay the ground work for future interpretations. Right now, we can’t summarize.
- Include interpretation of criteria summary in Chapter 4.

**Interpretation vs. Synthesis**

- A suggestion was made to shift from a focus on interpretation of the data to a focus on synthesis of the data.
- Differing views were expressed about how far the report should go in interpreting the data. One group recommended that the report just stick to the facts and avoid addressing “policy.” Other groups felt that it was very important for the FS to answer the “so what” question. Specifically, suggestions were made to be clear about trends toward or away from sustainability, or whether it is not clear; or whether there is more, less, the same, etc.
- This chapter should synthesize the information about what we have learned from the C&I and draw out significant facts and trends. It should assign some value to what we are seeing.
- Chapter 4 should draw out themes from the data and begin to synthesize what they mean.
- Chapter 4 should synthesize what is learned from the data and analysis of the C&I, and draw out significant facts, themes and trends. It is important for the USDA Forest Service to provide some information on what the data mean.
- The chapter should explore and highlight options for interpreting and applying the data at multiple scales through some tangible examples so that report users can

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- understand how they might do the same with the other indicators. The report should also direct them to how to obtain the C&I data for doing so. A few sidebar examples of how the C&I are being applied would be helpful.
- The group felt that Chapter 4 is important but needs to synthesize rather than interpret the data at the indicator and criteria levels.
  - Explain selection of indicators. Some are not worth it.
  - Some indicators are data and some indicators are sets of data where interpretation has already been made – and that interpretation doesn't necessarily have full agreement.
  - We are trying to build bridges between those doing science and others – this interplay will bring out richer interpretation.
  - This is a testing of how and how well we can do things to move us towards sustainability. So, we need to look indicator by indicator and then criteria by criteria, what we learned - and then roll it up and interpret it all together – synthesize. Gaps in weighting indicators. Interpretation stage enables the balancing act. This is not supposed to be an accounting effort. What did we learn, how do we know, what are the management issues, what do we do about it.
  - Can we synthesize without full information? Let's try it! Synthesize the information rather than interpret it. Look at the gaps. Evaluate if we even need information in order to draw conclusions and synthesize. May be able to do so even without more work – for now.

**Trend Analysis/Interpretation**

- A question was raised about how much we will be able to evaluate and determine trends and say whether or not the trend is good or bad.
- It is important to include the pros and cons of what we see from the trends. This discussion would highlight the complexity of what we are seeing and what we are trying to learn from the data.
- The report should include trends but also reflect on how trends may be interpreted differently.
- Interpretation should stick to large national trends.
- Use value neutral comparative language to describe trends.
- All participants felt it is important to report regional data and trends, especially when those trends would be masked by the national data. As an example, Indicator 10 'Area of forest land and net area of forest land available for timber production' may show net area in the United States has not changed but the pattern of where forests are harvested has decreased in the pacific northwest and increased in the southeast and this has implications for forest sustainability. When this is due to policy changes, this should be described.
- Key trends should be highlighted (e.g. the top three trends are ...and they are significant because...). The trends should be reported with less words so they are clear and easy to understand. If possible, describe the reasons for the trends.
- While the group supported the idea of clear and simple trend reporting they also suggested caution in combining, comparing or contrasting too many indicators in the abstract and attempting to 'oversimplify' data findings. Also gaps should be clearly identified so that report users do not draw false conclusions. The example

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- of the definition of the indicator term ‘protected areas’ was used to show how the lack of universal inclusion of lands protected in the United States mean that the acreage for protected areas is under-reported by the C&I and this could lead one to draw false conclusions.
- We can and should do trend analysis. Capture trends and/or establish baselines based on real input, not statistical inference. Need to look at the scale issue – capture trends on a regional basis. We should only point out where there are exceptions. Nationally, variances are interesting, internationally they aren’t.
  - Half of the forestlands in the United States are not captured by many of the indicators (e.g. protected areas lands don’t cover forested conservation easement or multi-use NIPF lands). Participants questioned whether Chapter 4 could capture some of the data pertaining to important forest trends that are not captured under the current C&I framework in order to avoid the pitfall of drawing false conclusions due to definitional data gaps.
  - Where possible, cause and effect relationships should be described as well as connections to local decisions. Participants asked that the chapter be used to build the case for active forest management, especially to address harmful trends. Several scenarios could be created to help the report’s users draw the link from ‘data to actions.’
  - Key trends should be highlighted (e.g. the top three trends are ...and they are significant because...). The trends should be reported with fewer words so they are clear and easy to understand. If possible, describe the reasons for the trends.
  - While the group supported the idea of clear and simple trend reporting they also suggested caution in combining, comparing or contrasting too many indicators in the abstract and attempting to ‘oversimplify’ data findings. Also gaps should be clearly identified so that report users do not draw false conclusions. The example of the definition of the indicator term ‘protected areas’ was used to show how the lack of universal inclusion of lands protected in the United States mean that the acreage for protected areas is under-reported by the C&I and this could lead one to draw false conclusions.
  - Sections relating to data interpretation should describe how these interpretations could then be applied (e.g., what trends do they indicate and why as well as the potential implications of those trends).

**Index of Leading/Key Indicators**

- Several groups expressed support for identifying indicators that can be considered key indicators for that criterion, or significant because of the linkage with indicators under other criteria.
- There was some support of the concept of a leading indicator. The alternative if we do not use leading indicators is questionable. What do we have in the end if we do not have leading indicators?
- If we develop an index, we should not leave out the ‘challenging’ indicators for which we may not have a lot of data or that are controversial.
- Indicators could be used to help us highlight where we need to make changes in where we invest our energies (e.g., which indicators, what data collection, etc.)

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The leading indicators should be few, well understood, and effective – show how well we are moving toward SFM.
- Caution – there are too many indicators to develop. Indices are only signals as used elsewhere. We don't want to over use or misapply. It would be like 'chasing a carnivorous rabbit the may turn on us!'
- Instead of an index, consider using some other type of indicator (e.g., some type of biological indicator).
- Might include in the report a discussion on the concept of an index and the logic behind developing and using one.
- Some groups thought the idea of developing an index or a set of indices was a good one but all who did recognized that it is not yet possible to do this.
- The concept of developing an index is good, but controversial and premature. Including a discussion on what indices might be and how they might be used could be useful.
- The group supported the idea of developing a set of 'core' indicators and mention was made of the Canadian system that has separated their indicators into 'core,' 'supporting,' and 'potential' indicators as an example. The group recognized that this is a longer-term undertaking but also asked if the chapter could flag 'key' indicators and/or 'driving' indicators.

**Index for Sustainable Forest Management**

- Currently, an index for sustainable forest management might be too complex to accomplish given thresholds, directions in which indicators are moving (increasing vs. decreasing), etc.. It might be valuable, however to provide a general index or description of a future index in the report.
- An index for sustainable forest management is a very good idea. A single number would be great and should be considered for the 2008 report since it would be difficult to obtain for this report.
- The index must:
  - Use benchmarks;
  - Must consider how each factor would be weighed in the index;
  - Should be developed through a collaborative process; and
  - Requires a systems approach.

**Interrelated Indicators**

- There should be passing reference to the interrelation of indicators. The report will have substantial volume as it is, and there is the potential for being subjective versus objective when doing this.
- Interrelated indicators should not be comprehensive, but addressed on a smaller scale with the use of one or two key examples.
- The report could present a synthesis thematically and using graphics – but it will be a challenge to avoid being duplicative.
- Chapter 4 should focus on connections between criteria by:
  - Describing inter-relationships between indicators;
  - Creating a matrix/graphic that indicates which data sets feed in which indicators;

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Considering a systems approach that integrates the indicators (perhaps with a narrative), looks at all phases and components, and recognizes the complexity of the system; and
- Not trying to have a comprehensive discussion of inter-related indicators with specific groups of indicators, rather having a general discussion about inter-relatedness at criterion level.

**Benchmarks and Thresholds**

- As an alternative to indices, consider some other way to benchmark. This might be done with a thorough discussion on themes in the synthesis.
- Some participants expressed support for the use of benchmarks and thresholds wherever possible and appropriate to do so (medical health benchmarks analogy).
- Chapter 4 should include benchmarks and thresholds to help public understand document, but should not make value judgments about how well doing on particular indicators. Threshold should be identified where there is research (i.e., Criterion 3). This evaluation should be similar to a medical examination and evaluating a person's cholesterol level.
- The Montreal Process Criteria and Indicators are based on each country having a national plan or goals. The United States doesn't have a national plan and goals for sustainability – can we even conduct this effort without it? We can't benchmark or develop thresholds or indices without goals.

**Significance of Regional Information**

- One group suggested that Chapter 4 should provide examples of how the C&I can and are being applied at multiple scales / levels (e.g., NE region, State of Oregon).
- Include regional information too. Otherwise, there is a risk of not getting the whole story or as much as we can from the report.
- The chapter introduction should set the report's context – e.g. the report will be used by the Montreal Process countries, but the report is intended for 'domestic' implementation of the C&I. However, the chapter should explain the reasons why the universal C&I definitions should be followed as well as a brief description of some areas where differences in United States forest management and regulations as well as trade practices make some indicators less relevant to the United States than others.
- Where possible, provide subsets of national data when break out of data by region (or ecoregion) would make it more useful and applicable.
- Use this report as a way to hold local and regional dialogues – like the 7<sup>th</sup> American Forest Congress. This will be a way to increase the input for 2008.
- Another view of the above – local/regional round tables aren't what's important. Get this going on the ground. Gather examples of groups/individuals who are already doing this.
- Need multiple reports – national and regionally-based reports.

**Structure**

- Using graphics in chapter 4 would be useful in providing general interpretation of the data, but the graphics need to be useful and not merely illustrative.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The participants did not feel that Figure 1 in Chapter 4 was useful and thought it should be eliminated from the report.
- The choice of what figures are included in Chapter 4 should be given some thought. This is a potential task for Washington Review Workshop.
- Two suggestions were a figure that includes the seven criteria and systems diagram.
- Authors need to ensure that the graphics provide correct interpretation. One suggestion for accomplishing this was to use formal models to create graphics that have meaning.
- One method for providing interpretation would be to include sidebars.
- Exploring the linkages between criteria is key for Chapter 4. Participants felt that if tables makes that interpretation useful than great, but do not include the table if it is confusing when it is completed. Two recommendations for tables in Chapter 4 are:
  - Avoid tables if at possible to increase readability; and
  - Use tables to illustrate linkages between indicators or between criteria, but avoid technical tables.
- The introduction should clearly describe the data gathering process as well as the data and process limits and opportunities. (Again as in the Chapter 1 discussion, participants asked for a clear pathway to participate in the process such as finding ways to fill data gaps or modify or delete non-relevant indicators. One participant turned in a paper with suggestions for addressing gaps in collecting data on non-timber forest products which relate to indicators in Criteria 2, 6, etc.)
- Several participants suggested a ‘feedback form’ at the end of the report whereby report users could comment on how they applied the report as well as information they would like to see in future reports.
- Use more graphics!

**Content – Miscellaneous Issues**

- This chapter should include how this report relates to forest planning in the Forest Service:
  - It would be great if this report led to an internal policy statement for Forest Service.
  - Outside public needs to know how this information will be used by the Forest Service.
  - Forest Service should develop and commit sustainability policy as stated in report.
  - Is this more appropriate to discuss this in Chapter 5? Chapter 5 is the place to talk about what to do with this report and by what agency, so the discussion of forest planning may be more appropriate there.
- Chapter 4 needs to be clear about how information relates to sustainability.
  - Chapter 4 should not be value-laden in describing path to achieving sustainable development, but rather should be value-neutral.
  - Information contained in this chapter needs to relate to the state of sustainability without getting value-laden.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Trends of sustainability and relationship to report need to be laid out in Chapter 1 and discussed throughout the entire document.
- Since ownership of forestlands in the United States affects their management, participants requested that ownership data be reported when relevant, e.g. shifts from harvest on federal lands to private lands. What are the implications of this to forest sustainability, trade etc.?
- Describe indicator overlaps, key linkages as well as the complementarity of the data sets so people understand how the C&I are intended to be used to make observations or draw conclusions. Also describe ways (possibly via sidebars) that other entities are using the C&I (e.g. the Northeastern states, Oregon state, Wallowa County).
- Use the most current data available in the report.
- How we feel about the changes we are seeing through the data should be addressed somewhere. Who should be responsible for commenting on these changes and what they mean? Is this something that should be addressed in Chapter 4 or elsewhere?
- One challenge is that there are several definitions of sustainability. These definitions are different for different land ownerships, so need to be clear about the definition. Authors need to avoid creating false expectations and need to have a clear presentations without values.
- One suggestion was to publish the positions of the advocacy groups, possibly as an addendum to report.
- Clearly articulate link to sustainability and earlier chapters of report.

**Role of Interpretation**

- Authors need to include some interpretation within Chapter 2, and not leave all the interpretation for Chapter 4:
  - Summary of each criterion should be contained in Chapter 2 and Chapter 4 should provide an overview and general statements of what process did and did not showed.
- Will anyone be satisfied with report if it does not include interpretation in report?
- Chapter 4 should highlight that adaptive management is only possible without strict interpretation, but that interpretation may only feed the “war” on timber.
  - Chapter 4 needs to acknowledge that the report has implications for what will happen in the future.
- The interpretation of results in Chapter 4 needs to be expanded beyond that contained in the current draft of the report because the interpretation is so linked to future actions.

**Peer Review of Report**

- Perhaps interpretation and inclusion of values could be addressed through independent peer review of experts. This could be a mechanism that would support the interpretation and would add creditability to process.
- The authors need to use a range of disciplines as framework for the interpretation – this might be good as an add-on to the report. This could be accomplished by engaging those people who look more holistically at these issues than the authors.

## **Review Workshop – National Report on Sustainable Forests Portland, Oregon April 30 – May 2, 2002**

- Participants would like to see open added questions included in report to serve as basis for independent peer review.
- The peer review should include a science-based approach and exploration by the experts of future implications of current actions or inactions.
- Peer review could identify “the good, the bad, and the ugly” where the ugly is too complicated or uncertain to analyze now.
- \* The report should include an independent peer review in an integrated fashion from experts

### **Post-Report Dialogue**

- Since there are lots of gaps in the report, we need to get buy-in for research and monitoring to fill in gaps for future reports. This could be accomplished by bringing in disengaged stakeholders and encouraging community-based monitoring, among other things.
  - Identifying the gaps will provide ties to Chapter 5, which should identify the missing pieces and what needs to be done at a local level.
  - Discussion of how these gaps can be addressed should be a component of post-report dialogue.
- Currently, there is no way to disaggregate the data from the interpretation. To encourage desegregations should start with ground level and move up, rather than reverse. This will allow you to implement actions mentioned in the report.
- Post-report dialogue is needed and should include broader groups and all scales.
- All groups agreed that the report, and Chapter 4 in particular, should be written in a way that fosters dialogue. Several groups expressed support for encouraging representatives of diverse stakeholders to produce their own interpretations in an organized and coordinated manner (e.g., under the auspices of the Roundtable).
- The idea of holding future dialogue on the meaning of Chapters 2 and 3 is sound. There is a potential role for the Roundtable on Sustainable Forests to convene this dialogue. There may be a reason to hold this dialogue at different levels in different venues – as a way of truth testing the findings of the report as well as advancing the thinking. If the Roundtable is not the convener, then who?
- The Roundtable should sponsor ‘post report dialogues’ to examine what the data mean and how they could or should be applied to elements of sustainable forest management.
- Invite Roundtable participants and other stakeholder groups to give critiques of the report, what the data are telling us, etc. in order to allow others to make connections from data to policy.
- Use the Roundtable and other venues to engage in the dialogue of ‘What is a sustainable forest?’ and use the indicators to inform the discussion and visa versa.

### **Inclusion of Values**

- Chapter needs to be non-judgmental and objective in interpretation (example on page 5). The chapter should objectively report the status of C&I.
  - The chapter should not dwell on areas of controversy (e.g., how much protected areas).
  - Chapter should focus on current status so report is viewed as impartial.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- The report and the interpretation should be able to be use as basis for informed discussion.
- Chapter 4 should put criteria and indicators together and discuss interactions without specifying goal.
- The focus of Chapter 4 should be on describing the big picture and current status.
- Rather than including values in Chapter 4, values can be discussed in advocacy documents that would follow this report.
  - It would be useful to have an independent group host dialogue on this report. This should be a function of the RSF not Forest Service (Explained in paragraph 3, page 15).
  - Clarification of process for hosting dialogue and encouraging advocacy documents should be discussed within the report. Also, it should be clarified that the RSF could hold the post-report dialogues.
  - One suggestion was to publish the positions of the advocacy groups, possibly as an addendum to report. This addendum could be published at same time as report is published next year. One challenge is that the compendium of position statements could be all over the map.

**Chapter 5 – Future Plans**

**Regionalization of the data**

- Start cultivating a regional dialogue following the issuance of the National Report to help insure the richness of information from the regional scale is preserved and applied.
- There is a need for regional cooperatives - particularly data/analysis cooperatives – across government agencies.
  - Identify mechanisms to make it easier to engage in cooperatives to foster common language.
  - Need different structure (e.g., group affected agencies across scales of government to collect data. Could plan budgets accordingly.)
- Regionalization – where possible, make sure the data are correlated with geographic location to maintain regional basis.
- Suggest sub-reports that analyze data regionally given that many people will want regional information for their region and it will be tough to wade through all the national information to get answers to regional questions.
- How can regional data be presented? Separate regional reports would be useful, as opposed to regional breakdowns within chapters. Data may not allow for this for the 2003 report, but perhaps this can be considered for the 2008 report.
- Acknowledge regional data gaps in the report, so regional stakeholders do not make policy decisions based on information contained in the report, thinking that it is applicable to them.
- Break out chapter 5 not just by region, but also by ownership group and forest type (like the 4 major forests discussed above [ref. to Hal Salwasser’s presentation on 4 forest types]).

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Emphasize regional approaches and/or present data on a regional basis.
- How do you break out these regions? Four potential approaches are:
  - 3 Regions (east, west, south);
  - 8 National Forest System regions;
  - 4 Regions (NE, South, West, Intermountain states); or
  - 6 RPA regions.
- Group was split on how to define the United States into regions. Some participants advocated the more detailed breakout (8 or 9 regions), while others wanted a smaller number of regions (3 regions).
- The number of regions needs to be small enough to keep the regional analyses simple, but large enough so that the regional data does not get lost.
- One suggestion was to organize regional data so that it is a cost-effective database used for regional analysis.
- Data should be gathered from the ground-up, not from the top-down. This would facilitate regional breakdowns or regional reports.
- Produce Regional reports now, if possible, but certainly in the future.
- Individual regional reports and disaggregated data
- Develop local, regional and national definitions of term that can be used to communicate data at all levels (e.g. IUCN classes, protected areas).
- Apply data at multiple scales and work to integrate and utilize local, regional or state level data in order to improve the richness and utility of C&I data.
- Ultimately, national-level data may not get us to sustainable forests and the United States should consider moving to regional level reports in the future.
- Data should be disaggregated as much as possible and tied to local and regional geographic information and trends.
- Next stages must include data gathering at more local levels.
- The report is missing the local perspective. To look just at the national level does not give accurate information from a regional perspective.
- Instead of the same sort of national scale for 2008 report, glean the national report by synthesizing regional efforts and summarize the into an international report. Who might be other partners?
- Enhance interagency cooperation and use regional cooperatives to collect and analyze the data.
- Produce individual data reports on each region and post these reports on the Roundtable website before the World Forest Congress in September 2003.

**Expansion/Addition of Indicators**

- There may be a need to add indicators or interpretation of existing indicator to address full range of forestry resources including fisheries, communities, conversion/fragmentation/parcelization to non-forestland.
- The indicators on spiritual and social values need to be expanded and clarified because they are a major part of the overall context in which the C&I are set. (e.g., try to verbalize the link between the spiritual indicators and sustainable forests.)
- Chapter 5 should address the problem of broadening the interpretation of indicators. Identify the fact that the indicators are insufficient to determine

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

whether forests are being managed sustainability. For example, C&I give too much emphasis to timber in criterion 2.

- Consider the possibility for a ‘Criterion 8’ to address indicators relevant to the United States and private landowners that were not included in the Montreal Process or conversely consider adding indicators to the 7 Criteria to more fully capture their meaning and local relevance.

**Specific Indicator Concerns**

- Indicator 46 needs zip code level analysis. But, are zip codes “real” communities, like watersheds and ecosystems? We need better data and collection methodology.
- Indicator 35 – Do a better job of tracking the data and include land ownership. Need better tracking of tourism. Tell the truth, we have not had sustainability in mind for 50 years. Tourism is the canary in the coal mine. Tourists will not camp in clear cuts.
- Indicator 53 – What influences are occurring? How can we use local stewardship for education and public awareness? Make sure the playing field is level. It’s critical to understand at the ground level the impacts of our decisions. We need feedback loops to measure intent.
- Indicators 10, 29 and 38 – more work needs to be done on non-timber forest products.

**Data gaps**

- Chapter 5 should indicate and/or address how going to resolve data gaps. The chapter should answer the questions: Where are there data gaps and what data is used to fill the dates? How do we address these data gaps in the future?
- How can we address data gaps for the future?
- Chapter 5 should identify the key policy questions and data gaps.
- Resolve data gaps, e.g., reporting on protected lands, nontimber forest products etc.
- Identify key policy issues and data gaps to be addressed in the future (and a process for getting them addressed).
- There are several areas where there is no data – non-timber forest products. Use private landowners and industry to help collect data.

**Functionality**

- Since the report cannot make policy statements, it is critical to provide the information that would allow stakeholders to identify areas of improvement and interpret the information.
- Separate out the advocacy from the objective reporting. This report will not say whether each indicator is sustainable. The report should state that it does not offer policy statements, but explicitly state that stakeholders are invited to develop their own analyses and bring them to the Roundtable.
- Chapter 5 should state that federal agencies should take the report and incorporate it into their strategic planning. Stress that they should work collaboratively on this. Also stress that the FGDC could help the agencies work together.
- Report should be a learning tool.

## **Review Workshop – National Report on Sustainable Forests Portland, Oregon April 30 – May 2, 2002**

- Use of the report as a planning tool.
- The report should not just be written for the Forest Service to help with their planning. It should also be for community groups, states, etc. This would help determine needs for private forest landowners.
- Should make sure that report is usable for community and NIPF planning, especially to address tax issues.
- If report is truly value-neutral, then we should take out references to programs that are not value-neutral (i.e., listing SFI in Chapter 2, Criterion 7).

### **Format/Structure of the Report**

- Create three reports:
  - A data report that is more technical than chapter two currently and includes an executive summary.
  - A 50-page ‘popular’ version that indicates clear trends, the process for engaging in the dialogue on meaning and applications for indicators and that seeks to unify and empower people to participate.
  - A 10-page executive summary that has an attractive, accessible format (e.g. a ‘USA Today’ type of look).
- The Chapter should give a sense of where we as a nation are headed and what are our priorities.
- Utilize other formats and publications to report out findings from the 2003 Report and consider versions geared for particular stakeholder groups such as loggers, harvesters, which can depict clear trends relevant to their interests.
- Make the report relevant to decision makers. Consider having some decision makers preview the report to comment on its usefulness to their applications.
- Consider making versions available that are accessible to other users or languages and cultures (First nations, migrant forest workers, local governments).
- Have a clear outreach and communication strategy and seek to educate the public about sustainable forests. A report format for sharing information has limited utility so it’s important to consider other formats, venues and strategies for outreach, communication and input:
  - Make material accessible to multiple levels and programs (e.g. Project Learning Tree in schools, the Kids Mini Page, news franchises).
  - Develop clear strategies for marketing and engagement through an ‘action research process.’
  - Develop clear, tangible stories that we can use to communicate key messages.
  - Utilize multiple formats – a ‘multi-product information system’ (computers, CDs, websites, exhibits, forums, ad campaigns, workshops, interactive formats, multiple levels of detail available based on user interests). Consult with user groups to determine what venues and formats will work best for them.
  - Consider tie-in to existing formats (e.g. the T.V. weather watchers added an environmental component).
  - Provide for an on-going process for participation that is both linked and not linked to the report.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Expand the role of the Roundtable in connecting to stakeholders and multiple interest levels and getting information ‘out’ and feedback ‘in’ to the process. The Roundtable should sponsor ‘post report dialogues’ to examine what the data mean and how they could or should be applied to elements of sustainable forest management and should share these findings through its outreach strategy.
- Link to current processes within the public and private sector such as current processes underway to improve forest planning and initiatives to collect data through the private sector.
- We know what we are trying to achieve. What synthesis is needed to achieve it? “If you don’t know where you are going, any road will get you there.”
- We’re on the right track, and this is a good first start. We need to think ahead and keep in mind the cost/benefit analysis. Use the three legs (economic, environment, and social) to decide the different components or critical levels. Each leg identifies key issues and focuses on them while keeping in mind the cost/benefit of the issues.
- The national report is for domestic consumption and feeds into the Montreal C&I multi-national report. We need to explain the underlying cultural values and private property rights that shape our views. Do not generalize so much that an understanding of our culture is lost. Tie it back to our laws and economic structure. Public’s legal rights to have to access to public land as well as private property rights.
- Incorporate cross-sectoral (e.g., agriculture, community, and forestry) approaches in the report. This will encourage groups to have a more integrative approach, working with each other rather than separately to achieve their goals.
- What should the report look like? Telescopic look leading up to an executive summary. Cliff notes format because many people will not read an exhaustive report.
- We need working models of integrative sustainability rather than data. Data should be addenda to support models, otherwise get lost in data.
- The report is more complicated than it needs to be. Couple full cost accounting with Gifford Pinchot philosophy – greatest good for the greatest number for the longest time.
- Somewhere acknowledge this is a working document and acknowledge the effort put into creating the report.
- Include a discussion on what the policy implications are.
- Develop a pathway and process for addressing insufficiencies in the current Criteria and Indicators and widely publicize and facilitate participation in the process.
- We should seek to ensure that the report does not become ‘an end unto itself.’
- The report should not only report what is, but venture into the ‘what ought to be’ arena.

**Audience**

- We need multiple reports – international report, policy maker report, and regions/stakeholder report. The international report fulfills our obligation on the state of our forests using the C&I. It does not require regional data or case

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

studies. It need not be expensive to produce since the information is already there. Regional reports should contain regional data, case studies, sidebars, and more interpretation, allowing stakeholders to decide where they are going based on data and information presented.

- The report is missing the local perspective. To look just at the national level does not give accurate information from a regional perspective.
- The tone needs to be towards the general public. How does sustainable forest management affect my future? How should I be involved? The second audience is scientists and researchers. The report should make the 3 legs come alive and provide opportunities for researchers to interact and share information. The report should be a catalyst for bringing together communities of interest.
- We are assuming everyone wants to achieve sustainable forest management. The three legs are three separate schools of thought. The report helps the three groups understand each other and will help create dialogue among the hierarchy of audiences. Please reassure the authors that this report will be used and will bring people together.
- Regarding the public document...
  - Consider that the American public doesn't want to read. Just wants to know it's done.
  - Consider that the public is the most important audience.
- Multiple reports are needed, and the local/regional report needs to engage communities and citizens.
- Ensure that this report is useful and accessible for a broad range of stakeholders (landowners, communities, agencies for policy planning, etc.).
- Indicator language constraints may lead to bias and we may need to develop our own United States-based language in the future.

**Policy Priorities**

- Emphasize information in the report that will help identify where future policies need to be focused (e.g., Farm Bill 2003 Implications and the effects of industry processing capability on NIPFs).
- Ensure information is applicable to local efforts and community groups.

**Substantive Issues to be Addressed**

- Authors should emphasize data, so presenting data and trends should be a higher priority than interpreting the information.
- Data and Trends: Are we capturing sufficient data in the summary report vs. putting it in the technical report?
  - How do authors determine what to pull out of the technical report for the summary report? Emphasis could be on data that would allow analysis for policy decisions.
  - How to interpret the data should be based on what is best or most useful for the country.
- Success stories: Chapter 3 is useful in identifying success stories, but we also need to highlight areas of improvement in Chapter 5.
- What changes are necessary to enable improvements in the areas that need

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- improving?
- Access to authors: How can people ask questions about the data/technical information? The chapter should identify who readers can call or write, and how the readers can access further information. This is especially important for people without internet access.
  - Defining sustainability: If we cannot define it, then we need to say we can not define sustainability. If we can, then what is sustainability and are we moving towards it?
  - Four types of forests: The four forest types presented by Hal Salwasser (high intensity forests, protected areas, etc.) in combination can lead to sustainability, but in isolation, they will not accomplish sustainable forest management. These should be discussed in Chapter 5 and possibly through the report as an overarching theme.
  - Limitations of report: There has been difficulty in getting certain agencies to participate in this process (e.g., EPA). This chapter should acknowledge the difficulty of getting the entire federal government on board, and should recognize this as a limitation of report and a goal to work on in the future.

**Future Activities of the Roundtable**

- Continue to evaluate the concept of an index of leading indicators or some other alternative that would achieve the same goal. Evaluate the potential value of applying an index of ‘trailing’ indicators.
- Agencies should start using the report and telling what it means.
- Set a sustainability target such as defining and ecological target. This would require both policy and technical changes.
- Expand what we currently measure to characterize forest integrity so that it is not just a measure of species richness based on the number of species. Don’t lose the regional trends.
- To tell us more about forest integrity, measure more than richness in terms of numbers of species.
- Do more to integrate different data sets such as data on fish and other aquatic life which are also part of the forest ecosystem.
- Actions for World Forest Congress in September 2003.
- Produce individual data reports on each region and post these reports on the Roundtable website before the World Forest Congress in September 2003.
- The Roundtable could consolidate reports from advocacy groups, summarizing what they think the report says and what policies should be developed from it.
  - Host dialogue based on these views and positions.
  - Place these reports on the Roundtable website for public access.
- Roundtable would facilitate incorporating this into strategic planning, not for data issues but for policy planning.
- Initiate a scientific peer review process to help make sense of the data and what they mean.
- We have built monitoring systems for biological issues, we need to develop the same monitoring in socio-economic realms. This doesn’t have to be done by the

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Forest Service. The F.S. can cooperate with other organizations to build these monitoring systems.
- We need to step back and question the values that are underpinning and driving our decision-making. Are they sustainable?
  - How are we reaching out across the country to explain the importance of this to local communities?
  - We need to advertise this in a major way and get buy-in on future data collection.
  - The challenge is creating community collection methodologies.
  - There are several areas where there is no data – non-timber forest products. Use private landowners and industry to help collect data.
  - Need mechanisms to collect it. Weyerhaeuser could use mushroom permits to deduce mushroom collection.
  - Companies can add more questions to annual reports to collect additional data regarding non-timber forest products. This is just one example.
  - Convince individuals/companies that this is a good tool to define sustainability.
  - Point out the rural income generated from non-timber forest products collected on industry/private land.
  - It could be seen as positive and get notoriety – industry supporting communities with access and permits.
  - Look at the adaptive management model.
  - Answer the question, ‘what forest uses we are trying to sustain?’ to help refine the focus of activities in the future.
  - (Comments of Susan Alexander) Take steps to improve the quality and availability of the data for the C&I for non-timber forest products (Criteria 2 & 6). Specific examples are presented in the 2-page document provided by Susan at the workshop (forwarded to the authors).
  - Use all that we have to tell the story. This include the story we learn from the richness of the data, as well as what we know on a broader ‘intuitive’ level. In other words, expand the interpretation of what we learn from the C&I.
  - Resolve the differences on fragmentation/parcelization/landuse. Include more facets (roads, ownership, etc.) in fragmentation and do more with the data we have.
  - Expand our interpretation – how to make sense of the information we have (e.g., look at whether our use of fossil fuels matches with our concern about sustainability. We may be using resources that do not allow us to sustain (may also be socioeconomic concerns).
  - Reference life cycle analysis of wood use sustainability of construction products.
  - Place a greater emphasis on the cultural concerns/sustainability of cultural values.

**Follow-up Dialogue**

- Convene post report dialogue forums to understand, discuss and debate what C&I data indicate and how this affects sustainable forest management.
- Have the Roundtable facilitate follow up discussion: in particular, invite analysis and policy reports from advocacy groups and host discussion on this. The Roundtable could potentially foster a scientific peer-review of the report for interpretation.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Start cultivating a regional dialogue following the issuance of the National Report to help insure the richness of information from the regional scale is preserved and applied.
- The report won't be able to truly reveal the richness of what is going on so the other outreach and dialogues are critical.

**Future Use of 2003 Report**

- Participants are concerned about placing the reports only on Internet and about the degree to which the process is relying on the Internet. This does not work well for landowners and communities who do not have high-speed Internet hookups. This could be addressed by:
  - Ensuring that there is a center or person to process requests for printed materials; and
  - Creating a help line.
- Need to consider how people can and will use this report in the future and how to get the word out about the report. How will the report be marketed?
- Perhaps some agencies that have chosen not to get involved do not understand what their role is or should be, so the report should be marketed to them.
- Better marketing would help bring additional people/stakeholders into the process in the future.
- Perhaps the Roundtable could facilitate the marketing of the report.
- Future reports and on-line resources should break out regional data as much as possible.
- Organize the data so regional information available in a cost-effective database. Do not just create a database for this report, but rather create a database that has greater utility for other purposes
- Report and database should:
  - Serve as a clearinghouse function so people can search by participation criteria (i.e., land use type), if possible;
  - Include trends on property taxes by ownership, if possible, to determine where lands are converting to home ownership;
  - Include information about fire management; and
  - Incorporate National Resource Inventory (NRI) data on land uses.
- Develop peer review process for the report and use this peer review process to develop the Chapter 4 interpretation, if possible.

**For 2008 Report**

- To tell the story in 2008, do not be slaves to the C&I. Use a more intuitive approach.
- For the 2008 report – 'let the land tell the story'. Evaluate current land management practices to take stock of our progress towards SFM (e.g., via acreage, determine how much land in Federal Parks, private lands, etc.). Then determine the management controls (the policies) and objectives of the land owners. Take this information as a basis against which to measure C&I (e.g., set aside by land management type, then reaggregate). This may be a cost effective approach to do a C&I assessment.

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

- Recognize state versus federal control of land in this context.
- Recognize the role of forests in the east versus the west (e.g., more a part of the economy in the east versus more of a recreational focus in the west).
- States need to adopt the C&I as a framework to help us prepare for 2008 to enrich the database.
- Resolve differences over fragmentation and parcelization for 2008.
- Report should state or investigate how this material can be captured in a way that dovetails with the reports of the other Montreal Process countries, so we can get a global look at the temperate and boreal forests.
- Right now the countries are interpreting the information differently, so the merging of reports is difficult and we need to work on this.
- Measurements exist for sustainable agriculture and the United States could try to adopt similar measures for sustainable forest management.
- The report should evolve to be more holistic, not just ‘tree centered’ by reporting more fully on indicators under Criterion 6 and 7. For example, recreational values are important. Consider reporting by eco regions rather than forest service regions so that data are more relevant and applicable.
- Draw links between landscapes of the whole system, link to other landscapes (not just forested) and describe the connectivity of systems.
- Expand and utilize local knowledge and social and community-based data streams. Look for ways to engage on-the-ground people in filling the data gaps.
- Consider the use of ‘sub-indicators’ to better break out the data -- especially for indicators with multiple variables such as ‘forest biodiversity.’
- Tackle critical issues affecting forest sustainability such as fragmentation and parcelization.
- Next stages must include data gathering at more local levels. This data should then be rolled up into the 2008 report.
- To maintain interest, collection methodologies should be developed that will both inform and be useful to communities of interest. The report also should be a catalyst for communities of interest to work together and share information.
- One sentiment was that we should not be discussing the 2008 report until we understand and come to some conclusion and benchmarks for 2003. This participant was concerned with the focus of this current report – what is it? We need to identify how we are going to use the data/what we want it for and work backwards.
- This is only stage one of the process. We need a flow chart to see what we have, what we can make of it, and figure out how far we have come. Before the 2008 report, we need stages 2 and 3, otherwise the report appears to be an end in itself.
- Instead of the same sort of national scale for 2008 report, glean the national report by synthesizing regional efforts and summarize the into an international report. Who might be other partners?

**Review Workshop – National Report on Sustainable Forests  
Portland, Oregon April 30 – May 2, 2002**

**Additional Concerns**

- Supply and per capita consumption of wood in the United States is telling – can we sustain this?
  - Compare our per capita consumption to international consumption.
  - Americans have a strong psychological need to feel we have control. Consequently, we need to recognize that, comparatively, we are doing well.
  - On the other hand, viability of changing economic conditions relies on consumers. Sometimes we do it to ourselves.
- How does the data become part of a process that informs decisions at all scales and levels? How does this process motivate different communities of interest to work together? How does this process facilitate a process like Oregon’s efforts – one that impacts throughout their system? All along the way, we need to measure using all three legs.