Appendices

Appendix A1:

Background Research for Developing this Assessment

Forest Plan Revision

Forest plans provide strategic direction and outline broad goals and priorities that help to guide local USFS managers in taking specific actions and conducting work on particular projects as part of their on-going management of national forests. Six major components are generally included in a forest plan:

- desired conditions;
- objectives to achieve the desired conditions;
- standards incorporating legal and regulatory requirements on land uses and management actions;
- suitable and unsuitable uses of various areas;
- identification of special designations and other management areas; and,
- a strategy for monitoring results over time.

A forest plan generally provides strategic direction for the entire forest as well as provides more specific management direction for local geographic areas within the forest. The planning process is the vehicle through which the USFS applies the many and varied laws that pertain to National Forest System (NFS) lands and to their management by the USFS.

Guidance for Forest Plan Revision

Guidance for Forest Plan Revisions comes from several key USFS sources. In 1997, a Committee of Scientists was named by the Secretary of Agriculture to provide scientific and technical advice on land and resource planning on the national forests and grasslands. The findings and recommendations in their report, *Sustaining the People's Lands: Recommendations for Stewardship of the National Forests and Grasslands into the Next Century* (March 15, 1999), provide a comprehensive foundation for thinking about and approaching forest planning. The *USDA Forest Service Strategic Plan (2000 Revision)* articulates the mission of the USFS and establishes four main goals and eighteen objectives for meeting those goals. These documents provide the most current update to NFMA, and are used extensively in the proposed *2000 USFS Planning Regulations* and the proposed 2003 revisions to those regulations, which are intended to replace the 1984 regulations that guided the last major round of forest planning. In addition to these official USFS documents, guidance for revising forest plans comes from policy directives and statements made by USFS leadership and from the practical experiences of numerous USFS staff who have worked with the existing plans for many years and have informed and reasoned opinions about what needs to be revised and how that might best be accomplished.

The GOPB Team reviewed all of these sources of direction for USFS planning and consulted with the personnel from the Dixie, Fishlake, and Manti-La Sal National Forests in order to devise an approach to social-economic assessment that would help meet the needs of the planning teams for these three forests. The GOPB Team also reviewed

social-economic assessments conducted for other recently completed forest plan revisions to assess the usefulness of their approaches.

Current Directions in Forest Planning

The context in which forest planning is currently taking place differs significantly from the planning context of the 1980s. Not only have ecological, social, and economic conditions changed dramatically, but also the basic paradigm of forest planning and management has shifted in response to those changing conditions. The first set of forest plans under NFMA embodied an economic-output orientation that was the legacy of high post-WW II demands for timber production and was deeply embedded in the Agency's budgetary incentives and management paradigm at that time. In the current round of forest planning, the emphases are changed from the "products of the land" to the "condition of the land;" from "outputs" to "outcomes;" and from "sustaining commodity outputs" to "sustaining ecological processes." "Ecosystem management" is the paradigm guiding current planning efforts, which focuses on sustainability and stewardship, and gives greater attention to the human dimensions of land and resource management.

A main thrust of current directions in forest planning is to do a better job of balancing ecosystem health with providing multiple benefits to people, and to collaborate in planning to a greater degree with the American people who own these lands. The Committee of Scientists stated that, *"We believe that the two guiding stars of stewardship in the national forests and grasslands are sustainability and the recognition that these are the people's lands" (1999:xiii)*. Their report discusses the issues involved in ecological sustainability, economic and social sustainability, building the stewardship capacity for sustainability, the processes for and challenges involved in collaborative planning, implementing law and policies governing the national forests and grasslands, and external influences on USFS planning.

The mission of the USFS, as stated in its 2000 Strategic Plan, is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." Its four strategic goals (in order) are:

- ecosystem health ("promote ecosystem health and conservation using a collaborative approach to sustain the Nation's forests, grasslands and watersheds");
- multiple benefits to people ("provide a variety of uses, values, products, and services for present and future generations by managing within the capability of sustainable systems");
- scientific and technical assistance ("develop and use the best scientific information available to deliver technical and community assistance and to support ecological, economic, and social sustainability"); and,
- effective public service ("ensure the acquisition and use of an appropriate corporate infrastructure to enable the efficient delivery of a variety of uses").

The current directions in USFS planning recognize that there are many important connections between ecosystem health and the health of human communities. Ecological, economic, and social sustainability are generally referred to together, implying important connections

between forests and the communities in the vicinity of these lands. Recognition of these connections has led the USFS to focus its social assessments and impact analyses on the contexts within which national forests sit, and to pay particular attention to the needs, capacities, resiliency, and vulnerabilities of nearby rural communities. But given that these are "the people's lands," belonging to all of the American public, the USFS also has legal obligations to consider the concerns and interests of non-local communities of interest as provided by the requirements for public involvement included in the National Environmental Policy Act.

Even though current directions in forest planning recognize the importance of the human dimensions of ecosystem management, USFS employees admit that most of the social and economic data and assessments that they generally include in forest plans are not terribly helpful for providing management guidance. The USFS employees from the Dixie, Fishlake, and Manti-La Sal National Forests emphasized that they need data that are relevant to agency decision-making, and that they need to understand how these data link to the lands that the USFS manages and to the realms of authority within which the USFS operates.

Previous Social-Economic Assessments for these Forests

In developing the framework "Linkages to the Land" for the Dixie, Fishlake, and Manti-La Sal National Forests, we reviewed a variety of documents in order to become familiar with how socio-economic information was used in their existing forest plans, understand how socio-economic assessments are typically done on other forests, and identify the most current and innovative approaches to doing socio-economic assessments, particularly in relation to forest lands. From those documents we both gleaned a few useful ideas, and saw examples of things that had not worked as well that we could avoid in our own work.

Since this is a forest plan revision, we began by reviewing the existing Land and Resource Management Plans (Forest Plans) for the Dixie, Fishlake, and Manti-La Sal National Forests. All three forest plans were developed and approved in the early to late 1980s. It appears from reading those plans that a conscious effort was made to include social and economic analyses, but those analyses were inserted into the plans as somewhat separate pieces. These social and economic analyses were not well integrated with the biophysical analyses, they were not used to inform plan decisions, and USFS personnel from those forests admit they did not prove useful over time to management decision-making.

All three forest plans used a system known as Socially Responsive Management, developed by the Foundation for Urban and Neighborhood Development (FUND) of Denver, Colorado. Fundamental to this approach is a defined geographical area, known as a Social Analysis Unit, used to describe current and possible future social and economic conditions at local and regional levels. The Social Analysis Units used in the three forest plans are the Human Resource Unit (HRU) and the Social Resource Unit (SRU). A SRU is an aggregate of HRUs. The Socially Responsive Management approach uses seven cultural descriptors and four economic indicators. The cultural descriptors are as follows: public and their organizations; settlement patterns; work routines; communication networks; supporting services; recreational activities, and geographical boundaries. The four economic indicators are: population change, employment mix, wage structure, and local labor supply.

All of these variables are analyzed and described in the HRUs, which are drawn from the

forest's "Zone of Influence." Each forest plan has a very clearly defined geographical area within which it is assumed forest management has an effect on the population. How these zones are selected is never made clear; it appears that in most cases, the ZOI is merely comprised of the counties that surround the forest. This appears to be somewhat arbitrary, especially considering that delineation of the zone of influence took place before the description of HRUs and SRUs; even though they may have done a good job of categorizing the HRUs, all their work is irrelevant if not placed in the proper context. We decided that our assessments should not be arbitrarily bounded to geographic areas.

Finally, all three plans used Present Net Value as an indicator of the economic efficiency of projects under the various proposed alternatives. This process has since been discontinued by the Forest Service; projects are considered on merit rather than relative contribution to federal coffers.

In the first round of forest planning, it was expected that the plans would be revised in about fifteen years. The socio-economic stuff contained in these three plans doesn't have anywhere near that kind of shelf life. Most of it merely describes certain conditions in certain areas at specific times. There was some effort in a few cases to predict trends, but they were typically shallow attempts. It became evident to us that for the social and economic assessments to be relevant in the plan revision process, they would have to be designed so that they would be useful for informing decisions throughout the life of the plan. No static description of conditions would be sufficient.

Better Models for Social-Economic Assessment

After considering the current forest plans, we turned our attention to other federal projects that were similar to ours—ones that had multiple forests working cooperatively to develop new approaches to management dilemmas. Three in particular appeared to be relevant to our project: the Interior Columbia Basin Management Project, The Bighorn and Medicine Bow National Forests in Wyoming, and the Sierra Nevada National Forest Plan.

Interior Columbia Basin Ecosystem Management Project

The Interior Columbia Basin Ecosystem Management Project (ICBEMP) was based on direction from President Clinton to develop a scientifically sound, ecosystem-based strategy for management of 64 million acres of land managed by the Forest Service and BLM within the Columbia River Basin. This project involved 23 national forests in 3 regions, and was founded on concern over forest and rangeland health and concern for local community social and economic well-being. It was definitely an ambitious undertaking, and exhibited some new thinking in how to analyze social and economic conditions.

As stated in their Interior Columbia Basin Strategy document, the intent of the ICBEMP social-economic strategy was to design and implement restoration activities to promote workforce participation, supply demands for commodity products at various levels within the capacity of the ecosystem, and encourage intergovernmental collaboration.

In February 1998, the ICBEMP completed and released a report on their social and economic assessment. The study was designed to aid in identifying communities that may be economically and socially vulnerable to shifts in the management NFS or BLM lands. The ICBEMP analyzed 543 communities in 98 counties in 6 states for geographic isolation and association with lands administered by the federal agencies. 423 were also analyzed in

terms of industry specialization. Once characterized, the unique social natures and economic contributions of individual communities were evaluated.

The ICBEMP was fairly comprehensive in its consideration of the towns within the basin. However, their approach came up short in a few areas. First of all, there was not much primary research; the team merely used any already existing data they could find. While this isn't necessarily bad in and of itself, it limits the extent, context, and usefulness of analysis.

Characterizing communities and shaping management efforts to accommodate the various needs of the different towns is a noble thought. However, conditions change, sometimes rapidly, and so can the nature of the towns. For a project like ours, where we need our assessment to have a shelf life of at least fifteen years, such a characterization scheme could very quickly become obsolete.

Finally, characterization of the towns consisted mainly of categorizing the community's dependence on forest resources and their subsequent vulnerability to management. While categorization of well over five hundred towns is a daunting task and must obviously have a limited scope, it seems that the importance of the findings of a study like this to such a large number of forests would suggest a broader approach. Like many of the documents we reviewed, this one made the mistake of assuming that social and economic effects are the same thing. True, a lot of social impacts can be identified by economic measures, but a lot of important issues cannot.

Medicine Bow and Bighorn National Forests

The Medicine Bow and Bighorn National Forests commissioned Doctor Audie Blevins from the University of Wyoming to conduct social assessments for in their plan revision efforts. He performed an assessment and produced a report for each forest.

In this assessment project, Dr. Blevins and his team used a three-pronged approach, gathering data from 1) secondary background data - census results, county files, etc. and a comprehensive historical overview; 2) a six page survey developed by a number of coalitions asking local residents their views on various topics; 3) fairly intensive, in-depth interviews with individuals who were identified by the forest service as being interested as evidenced by their participation in public meetings and other involvement avenues. There were about thirty of these for one forest and a few more than forty for the other. In addition to these data sources, they performed a content analysis for the comments received during public meetings. Theirs was a fairly time intensive approach and required a fair number of faculty and students; they only gathered data from the counties that actually contained forest service land. Economic analyses were also done for the two forests, but separately, and the information was integrated by the FS into a condensed report.

While this is probably the best example of a proactive social assessment we looked at, there are still some shortcomings. First of all, the assessment only addresses communities and individuals from the counties that contain Forest Service land. For the Bighorn National Forest, this was only 4 counties. With an increasingly mobile population in the West, it is reasonable to assume that people other than those living in the four counties immediately surrounding the forest will be affected by management efforts on the forest.

Second, the commitment of time, people and resources for an approach like this is

prohibitive. The contract for the Manti-La Sal, Fishlake, and Dixie forests requires, at a minimum, assessment of at least 18 counties and 6 tribes. Wise decisions must be made as far as the allocation of the limited resources – personnel, time, and money – of this project. We would like to be as thorough as possible, and expect to include some work with individual members of the public, but we need to be realistic.

Third, this approach did not integrate the economic and social assessment approaches—a more coordinated approach to both topics would probably be more insightful in the long run.

Sierra Nevada Forest Plan Amendment

The Sierra Nevada Forest Plan Amendment is the result of a process started in the spring of 1998 known as the Sierra Nevada Framework for Conservation and Collaboration. It was focused on providing an integrated, collaborative framework of concepts, principles, and goals for use by foresters in 11 national forests in the Sierra Nevada and the Modoc Plateau. This effort attempts to integrate science into natural resource management through a variety of approaches at a variety of geographic scales. Through this framework, the Forest Service renewed its efforts to work with other agencies and the public in managing the resources of the Sierra Nevada.

This project doesn't actually provide social or economic analyses. It does, however, incorporate a great adaptive management approach that we felt could be useful as we crafted our own proposal. Typically, adaptive management is applied to the physical and biological sciences. We feel, however, that the approach is applicable in the social science realm as well and would like to see the Forest Service monitor social data as closely as it does biological data and make commensurate accommodations and changes.