EXECUTIVE SUMMARY

INTRODUCTION

Purpose of this Assessment

The purpose of this Socio-Economic Assessment is to assist the Dixie, Fishlake, and Manti-La Sal National Forests in their efforts to revise their respective Forest Plans.

Forest plans are revised every 10 to 15 years for the Forest Service to incorporate changes in the natural environment, new scientific understandings, social trends, and new laws and policies. The Forest Service faces a very difficult situation in revising their forest plans. They must attempt to find a balance between the various interests of its diverse constituent base (the American public), while complying with the many federal laws that guide its actions—while assuring that the land and resources are capable of accommodating these expectations.

One of the first tasks of the forest plan revision process is to inventory and assess relevant information on current conditions to help the Forest Service understand their management challenges. A social and economic assessment is one of these required assessments. It is also one of the most challenging and significant because many of the most difficult and contentious issues and demands facing the Forest Service today involve the social and economic interests of people.

This social and economic assessment shows how people and land are connected and influenced by one another. Economic, social, and environmental sustainability are interdependent goals for forest management, yet the Forest Service has traditionally focused primarily on environmental factors. As human uses and impacts have grown, it has become evident that forest management goals cannot be achieved without understanding economic and social factors as well.

A primary goal of this assessment is to promote a greater understanding of how Forest Service decisions and actions affect local communities and others who use the forest. Conversely, it also attempts to help these people understand how they affect forest lands. A second goal of this assessment is to involve people more closely in forest planning and to encourage collaborative planning that can ultimately help resolve many of these shared challenges.

Approach to this Assessment

As the Dixie, Fishlake, and Manti-La Sal National Forests designed their forest plan revision process, they recognized that decisions made by the federal government also affect state and local governments as well as American Indian tribes. Thus, an assessment team was assembled with partners from the Utah Governor's Office of Planning and Budget (GOPB), the Utah Division of Indian Affairs, and the Natural Resource and Environmental Policy Program in the College of Natural Resources at Utah State University (USU). The Forest Service also established cooperative agreements with the local communities through either their counties or Associations of Government (AOGs).

These partners represent the primary governing agencies of the study area, which encompasses 16 counties in Utah, 2 counties in Colorado and 8 American Indian tribes. The study area covers nearly two-thirds of the state of Utah—almost 54,000 square miles, including over 7,000 square miles of National Forest System lands. A study area of this size and scope is inherently broad—lending itself to a comprehensive, regional approach instead of close detail.

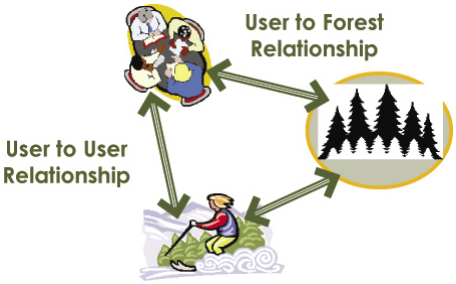
From the outset, this study strived to go beyond the traditional economic and demographic "snapshot" of a place at one moment in time. While this information was collected, it is most useful as a tool for shared understanding. This assessment goes a step further by also establishing a new approach to understanding the various ways in which people are connected to the forests. These connections or "*linkages,*" shape many of the issues and uses that impact the forests. The "Linkages to Public Land" framework proposed in this assessment helps identify, analyze, and categorize the varied ways in which people are connected to these three forests. This approach is unique and turns this assessment into a tool rather than a simple report. The findings of this report are also organized according to this approach.

In this framework, people are described by the *nature of their connection* to forests, not just by whom they are or where they reside. The most significant linkages to the forests are:

- Uses (including economies),
- Interests,
- Decision-Making,
- Neighboring Lands,
- and Tribal.

The ways in which people are linked to the forest can be defined in terms of the nature of their relationship, not just their interest or location.

The USFS is responsible for managing not only different users, but their relationships to one another as well.



Many people, particularly local residents, are linked to these forests in several different, often overlapping ways. Thus, the broad and deep linkages of people who utilize the forests most are highlighted without elevating any single interest or group.

This assessment also forged new ground in the *process* of creating it. It utilized a collaborative approach to include numerous stakeholders in developing the assessment. Local communities participated in regional and county workshops to review and develop the materials presented here. Their eager participation pointed to one of the most important conclusions of this assessment—that people want to be involved in planning the future of these forests and are committed to working collaboratively towards their goals. Thus, the process and interaction established in this assessment are important tools to carry its recommendations.

Using this Assessment

This social-economic assessment package provides reference information, tools, and ideas that can be used throughout this forest planning process. It is also hoped to be useful for implementing the forest plans—including future decisions, actions, and projects. While the framework and materials were developed specifically for these three forests, they were designed to be used in other projects as well. It is hoped that state and local governments, tribes, private citizens, and interest groups will also use these tools to better understand the potential effects of proposed management actions on people, cultures, society, and economies.

OBSERVATIONS OF IMPORTANT TRENDS AND ISSUES

Social and Cultural Context

Many different people, communities, and groups — both local and non-local — care about these National Forests. Connections and attachments to these forests are a part of their social and cultural values. Rural lifestyles, historic landscapes, and cultural traditions related to the forests are an important component of the quality of life to people who live near, or use, these National Forests. In addition to these more direct connections, many other people care about forests generally and have an interest in their health and conservation whether or not they ever visit them or have personal knowledge of them.

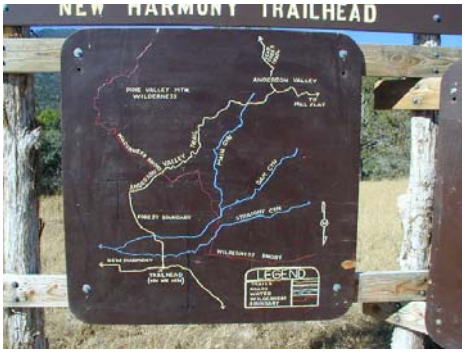
People learn about forests in a number of different ways, and this influences how they understand or value them. First-hand experience, scientific research, written reports and articles, or stories are all valid ways of understanding, but some people perceive that different knowledge or perspectives are not always trusted or respected. There is often disagreement over which research or perspective accurately portrays the situation.

Not surprisingly, there is a broad spectrum of ideas about how National Forests should be managed. While many *values* about the forest are often held in common—such as protecting forest health and involving people as stewards of the land—the *views* of diverse groups linked to the forest often differ. Even as people say they want the same thing, desired outcomes and approaches often diverge. Perspectives are often labeled as local versus non-local, but making this distinction is not always accurate. Perspectives and motivations can also be characterized along the lines of active versus passive management of forests, economic (commodity) versus intrinsic (amenity) value of forests, self-interest versus public interest, and traditional versus new uses. People with different perspectives expect to be heard and included, but accommodating all interests and uses is difficult, if not impossible.

Local Trends

More than half of the population of the study area now resides in or near urbanized areas such as Cedar City and St. George. In fact, 85% of Utah's total population lives in urban areas that are expanding and changing rapidly. The population is also becoming more ethnically diverse. Like much of the nation, Utah is transitioning away from a traditional resource-based economy, such as mining and agriculture, toward an information- and service-based economy. Many communities in this region have felt not only the economic impact of these changes, but have also felt an erosion of traditional lifestyles and cultures that accompanied this transition.

Many of the newest and fastest-growing uses of the forest are recreation-based, and have begun to compete with more traditional uses for the same resources. Recreation and tourism are becoming economic drivers in this region as they attract new residents and businesses. Many new users and residents have expectations about resource management that are different from the traditional views. These newer groups sometimes feel as though they are often not well represented in current government leadership and



Recreation is a major attraction for tourism and new residents and is changing many rural communities.

in the data and statistics used to help guide planning and allocate funding.

Many rural residents who have lived and functioned in the traditional economic setting for generations are facing new economic realities and trends. Rural communities often express an uneasy sense that their culture and traditional way of life is at risk of being lost, and they focus a great deal of their energy on safeguarding and defending these important social values and traditional economic activities.

This review of the social and cultural context displays the broad trends that are rapidly changing the demands placed on Forest Service lands. It also reveals the many different perspectives of people wishing to further their interests on forest lands. Within this context, traditional planning rarely stays current. A more adaptive planning approach with strong stakeholder participation is needed to remain current and effective. Greater responsibility and stewardship for making decisions and acting upon them is also important part of ensuring that shared goals are met.

Economic Linkages

While true everywhere, it is particularly evident in rural areas and tribal communities that the environment strongly shapes the economy, and is a significant force in social structure and well-being. Grazing, for example, is not just a business, but a visible symbol of the rural lifestyle. Discussing grazing with a purely economic or environmental logic is not sufficient to address cultural values. Workable solutions must consider all of these facets.

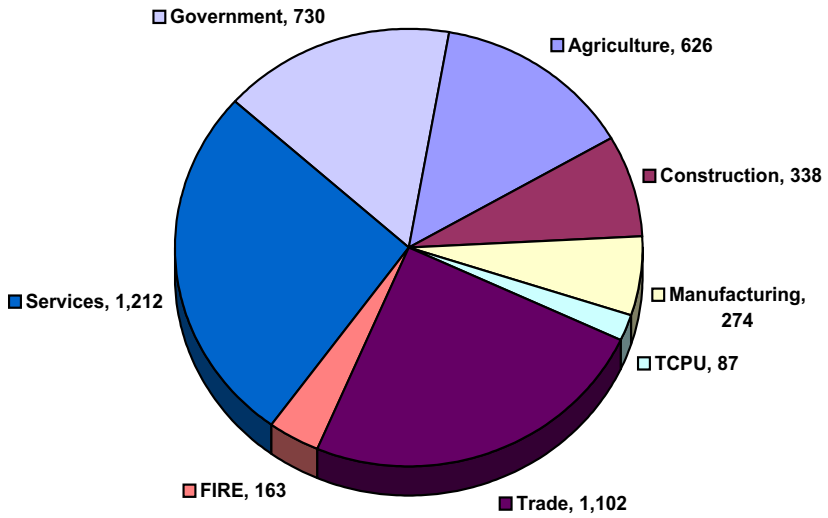
Forest lands often contain valuable resources that form the economic foundation of many local businesses and communities—including minerals, timber, forage and, most importantly, water. Thus, Forest Service decisions can have a significant impact on resource-based industries and on local economies. The Forest Service was originally created to help protect and manage these resources. The Forest Service was founded by a philosophy of conservation and multiple-use; and such uses, with their related access requirements, is central to local desires for economic diversification. As the number and types of uses and interests have grown in the last century, the focus of Forest Service management has often expanded beyond local economic sustainability. At the same time, the economies and communities surrounding the forests have also changed and placed new demands on the forests.

Primary Social and Cultural Context Findings

- Many people are connected to the forests. People are a primary shapers of the forest.
- People recognize that the long-term health and the quality-of-life of forest users and neighboring communities are intimately tied to the health of forest ecosystems.
- While many values about the forest are often held in common, desired outcomes and approaches often diverge between different people connected to the forest.
- People's knowledge about the forest draws from different sources and experiences, and this affects their perspective on how to manage the land.
- Changing lifestyles are shaping the forests and local communities. Perspectives and uses of these forests are shaped by local, national, global and trends.
- As forest uses change and expand, user management has become a greater challenge. Access is a primary issue as all forest uses and privileges depend upon access.
- There is a broad spectrum of people linked to the forest and ideas about how these National Forests should be managed. People expect to be included and heard, but accommodating all interests and uses is difficult.

The direct economic linkage between these National Forests and the communities surrounding them was measured for this assessment using the Regional Economic Models Incorporated (REMI) tool and data from the year 2002. The analysis shows a relatively small level of full-time equivalent employment linked to Forest Service lands—6.4% of employment for the overall study area. Broken down by Forest, this represents 9% of employment in the counties surrounding Dixie National Forest, 6% in counties surrounding Fishlake National Forest, and 5% in counties surrounding Manti-La Sal National Forest. As presented in *Figure 1*, industries with the largest direct employment linkages include (shown in descending order below): services, trade, government, and agriculture. **While the overall economic impact of forests is low at this regional (and at a statewide) level, the various industries supported by forest lands play a significant role in some local economies and lifestyles, particularly in smaller, more rural communities close to the forest.** There are noticeable differences between counties with economies dominated by rural industries and those with urban industries in this study area, and this affects economic dependence on Forest resources.

Figure 1: **Level of Employment Linked to Forests, 2002**
(number of jobs directly related to the forest)



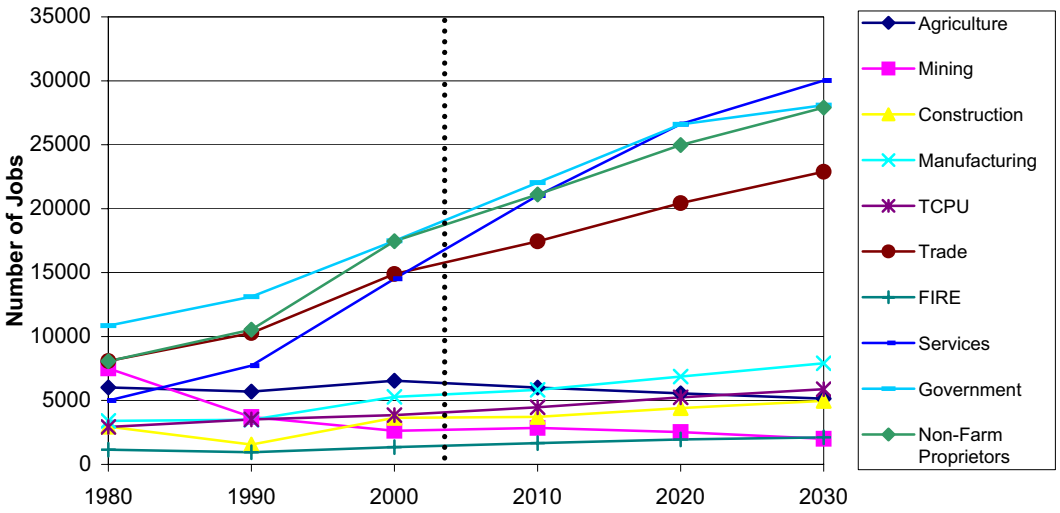
Source: 2003 Governor's Office of Planning and Budget Analysis using the REMI economic model

Like much of the nation, rural counties in Utah are in the midst of a significant period of economic transition. Economic forecasts produced by GOPB, presented in *Figure 2* on the following page, show that job growth in traditional industries based on the extraction and/or consumption of natural resources is declining or remaining flat while newer sectors in the technology-driven information economy are growing. Some of the changes associated with this transition have been heightened by the increasing difficulty encountered in developing resources under public regulations and processes. In addition, the types of jobs have changed in many traditional industries, often due to economies-of-scale and better technology. For example, agricultural employment in the study area has remained somewhat level over the last 30 years, but there are fewer family farms and more corporate operations.

The economies of communities in this study area are intertwined with larger, regional economies. Additionally, the goods, services, and employment opportunities of both regional

and local economies are increasingly affected by national and global trends. For example, recreation and tourism are growing across the state and shaping local economies, as well as forest management. Tourism and travel-related employment accounts for nearly 12% of all non-agricultural jobs in Utah, making tourism the fifth largest employment sector in the state. Economic development efforts in rural parts of Utah are focusing on diversifying employment, maximizing tourism opportunities, and enhancing technological capacity. Still, communities in this study area would like to maintain resource-based industries as a part of their economies and culture even as they adapt to these new trends.

Figure 2: **Employment Projections by Industry, 1980-2030—Forest Impact Area***



Note: *The Total Impact Area is composed of Beaver, Carbon, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Piute, San Juan, Sanpete, Sevier, and Wayne Counties. It does not include Utah, Washington, Mesa (CO) or Montrose (CO) Counties.

Source: 2002 Baseline Projections, Governor's Office of Planning and Budget

The Forest Service is connected to local economies in numerous other ways. Local governments also receive Payment-in-Lieu of Taxes (PILT) and Forest Revenue payments instead of property tax revenue. These respective revenues are shown in *Table 1*. There is much debate and local discontent as to whether this compensation is fair and adequate to cover the expenditures that local governments incur relative to providing services on public lands. Local communities provide services on public lands such as search and rescue and county road maintenance. Local governments also undertake many responsibilities for

Table 1: **Comparison of PILT Payments to Property Tax Revenues, 2002**

County	Acres Public	PILT (Federal)	Revenue per Acre	Acres Private	Property Tax	Revenue per Acre
Beaver	1,444,557	$360,507	$0.25	207,815	$524,097	$2.52
Garfield	3,142,393	$375,382	$0.12	168,759	$580,653	$3.44
Juab	1,795,925	$518,432	$0.29	374,616	$866,520	$2.31
Piute	422,267	$99,667	$0.24	62,198	$90,810	$1.46
Sanpete	588,053	$68,631	$0.12	434,184	$879,621	$2.03
Sevier	986,871	$627,296	$0.64	234,750	$2,213,689	$9.43
Wayne	1,864,969	$198,909	$0.11	56,027	$111,072	$1.98

Note1: Based on General Fund Revenues. Figures are estimates only. Acreage excludes water bodies.
Note2: The counties that were selected for this table are those that reported intergovernmental revenue similarly.
Source: Utah State Auditor's Office, Governor's Office of Planning & Budget

planning and managing of shared resources, such as water, wildlife, noxious weeds and fire management. While costs are often shared or supplemented by Forest Service funds, some costs, such as county road maintenance, are primarily left to local governments. Local residents frequently feel they are they are shouldering a large responsibility for benefits that everyone enjoys. A number of unmeasured natural benefits provided by Forest lands, such as water supply and quality, erosion control, and air purification, further complicate the question of the true value of the forest. Regardless, local perception of the economic value of Forests is further heightened by the large presence of public lands in many counties and the numerous cultural and social connections they enhance.

Primary Economic Linkages Findings

- The economies of communities in this study area are intertwined with larger, regional economies, as goods, services, and employment opportunities move between them.
- There are marked differences between counties with economies dominated by rural industries and those with urban industries, and this affects economic dependence on forest resources.
- Water is a critical and scarce resource which is directly affected by the management of forest watersheds in Utah. Water quality and availability is essential to the survival of local communities and businesses.
- Historical industry data in Utah and across the nation show a downward employment trend in industries that have traditionally supported rural economies—such as mining and agriculture—and an upward trend in service and professional employment.
- Agricultural employment levels in the study area have remained somewhat level over the last thirty years, but the types of jobs and ownership dynamics have changed.
- Recreation and tourism are growing across the state and increasingly shape local economies, as well as forest management.
- Economic development efforts in rural parts of Utah are focusing on diversifying employment and enhancing technological capacity.
- While the total economic impact of forests is low on a statewide level, the various industries supported by forest lands play a significant role in many local economies and lifestyles.
- Decisions and practices of the USFS affect economic ventures on and around forest lands.
- The economic linkage analysis shows a small proportion of the current local economy supported by activities tied to USFS lands. Industries with the largest direct employment linkages include (in descending order) services, trade, government, and agriculture.
- Property tax is a primary revenue source for local governments, but public lands are exempt from local taxation.
- Local government jurisdictions that contain, or are near public lands in Utah, collect some revenues other then taxes from the state or federal agencies that own these properties.
- Counties spend a significant amount of time and money providing services on public lands, and often lack an adequate revenue stream to do so in the way they would like.
- Resources and services that benefit many different people linked to the forest are often subsidized by local taxpayers.

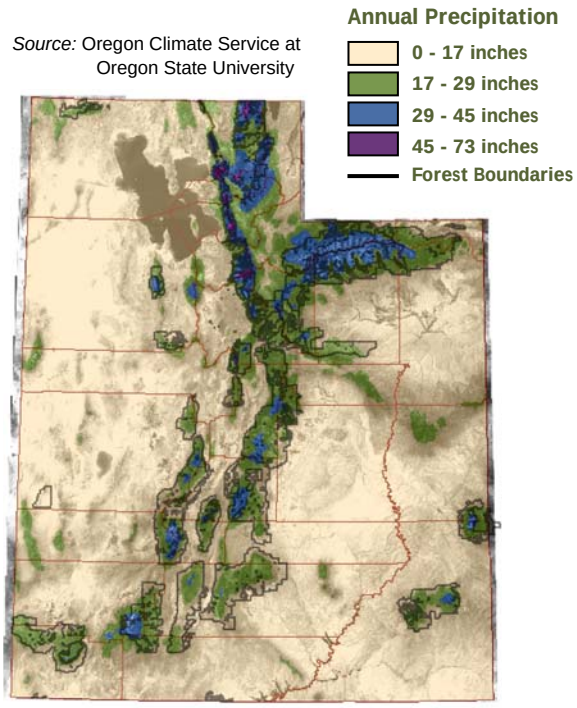
Neighboring Land Linkages

Forest Service lands are only part of the overall landscape. Neighboring lands, including private land and land managed by other federal, state, or local government agencies are another factor. Neighboring land linkages are important because people and lands nearest the forests are intertwined with forest lands and are directly affected by Forest Service decisions. Forests boundaries were originally drawn to include the resources directly related to Forest Service management mandate—watersheds, timber and forage. In Utah, this led to Forest Service control over most of the more mountainous, forested regions, and nearly all of the areas with high rainfall, (as shown in *Figure 3*). Public land ownership is shown in *Table 2*.

While forests are a comparatively small proportion of the study area, they contain a disproportionate supply of certain resources, recreation opportunities, and most importantly, water. Proper management of these resources is critical to the growth and survival of local communities. Many communities adjacent to the forest have developed economies based on these resources and have also make their own contributions to managing and improving these lands. Forests lands are also viewed as the backdrop or personal backyard of many local communities and a significant contributor to their quality of life. Neighboring land owners and communities claim a strong sense of ownership and stewardship toward forest lands.

Local residents generally recognize that the long-term health and quality-of-life of local communities is intimately tied to the health of forest ecosystems. These communities understand the need to balance present needs with future needs, and to balance use with conservation and preservation. As evidenced by their support for the "multiple-use, sustained yield" philosophy, people do recognize that resources are limited, but if properly managed, can be a continuous source of economic opportunity.

Figure 3: **Precipitation in Utah**



A significant amount of private land is adjacent to, or is an inholding within these National Forests. Growth and development near Forest lands is a growing concern as it places greater demands on local jurisdictions, the USFS, and the landscape itself. The wildland-urban interface zone—where forested (wildland) and urban (developed) lands meet—is a constant concern as the trend to build in and near public lands grows, and use by people, particularly in areas not previously occupied increases. Several factors make this a concern—impacts from users, fragmenting landscapes, protecting water and utility corridors, managing access, and the increased incidence of forest fire. However, land management determined by ownership or jurisdiction often complicates the approach to these problems and reduces their effectiveness.

Management of different lands is often not considered in the broad context. Instead, these lands are the victim of piecemeal management, based on the narrow interests of ownership or jurisdiction. While NEPA requires the Forest Service to consider broad impacts, other entities, such as counties, often don't have the same standards. Further, it is difficult for each entity involved to consider the bigger picture without the ongoing participation of others.

Table 2: **Land Ownership in Counties Surrounding the National Forests**

County	Forest Service Land*	Total Public Land**
Grand County	2.4%	95.7%
Carbon County	3.2%	63.7%
Juab County	4.5%	82.8%
Kane County	4.7%	89.9%
Emery County	7.4%	91.7%
San Juan County	8.0%	91.9%
Beaver County	8.4%	87.4%
Millard County	8.4%	86.5%
Iron County	11.2%	64.0%
Washington County	22.1%	82.3%
Montrose County, CO	22.8%	69.5%
Mesa County, CO	25.7%	72.5%
Wayne County	26.3%	97.1%
Garfield County	30.4%	95.0%
Utah County	32.1%	56.5%
Sanpete County	38.1%	57.3%
Piute County	40.1%	87.3%
Sevier County	59.4%	80.9%

Notes: * May include other National Forests, including Uinta, Grand Mesa, and Uncompahgre National Forests.

** Includes all government land, including BLM, National Park Service, SITLA, tribal land, and others.

Source: SITLA 2003, Colorado Department of Transportation 2002

Local governments often feel disconnected from forest management, even though they have obligations to provide services on the public lands, as well as on adjacent and in-held private lands. The Forest Service must consider national mandates and the interests of various local and non-local groups into its decisions, and these diverse constituents often have a fundamentally different vision for forest management than local officials. This often results in disagreement between local leaders and Forest Service managers.

The primary disagreement centers on the level of access—

Primary Neighboring Lands Findings

- Many of the valuable resources found on National Forest lands are also found continuing on to neighboring lands.
- Forest lands confer numerous benefits on their neighbors, such as water, natural resources, and recreation that are important to economics as well as to quality of life.
- Planning, managing, and servicing both public and private lands within and near USFS boundaries should include involvement of, and shared responsibility with, USFS neighbors.
- The land ownership pattern of this study area, with a prevalence of public land held by numerous agencies, has shaped how communities developed, and will determine their future.
- Development and population growth near forest lands is a growing concern as it places greater demands on local jurisdictions, the USFS, and the landscape itself. Major concerns include increasing residential development and human use, fire hazard, access, utilities, and water.

particularly motorized access— which is fundamental to activities on the forest. Struggles for maintaining or limiting access have spurred disagreement over some of the broad management directives the Forest Service must follow – such as Wild and Scenic Rivers designations, roadless areas and Wilderness designation. These designations are disliked by many local residents because they have the potential to impact uses and access, but the processes leading to these designations are viewed as not being sensitive and responsive to local and site-specific concerns. Locals feel as though they have very little influence in these processes and decisions, even though they are the most directly impacted economically and socially by these actions. Many interest groups concerned primarily with environmental aspects of forest lands support these management directives and believe they promote the interests of the broader public who shares ownership of these lands.

Out of these concerns has come an almost universal recognition and desire for greater stakeholder involvement in forest planning. The economic ties to forest lands vary across this region, but this assessment found a clear connection between Forest Service decisions and local economic decisions. Many businesses and communities wish to have better ties to the decisions of the Forest Service that affect economic development. Joint participation in planning and economic development efforts of different entities would benefit all parties, but there is a knowledge and understanding gap that needs to be bridged with a common language and methods of planning.

Decision-Making Linkages

The Forest Service is not the only entity that makes decisions affecting the forest and its resources. State and local governments also have legal jurisdiction and obligations on forest lands for such things as public safety and road maintenance, as well as management authority for certain resources such as wildlife and water conveyance and appropriation. State and local governments can also be given a special status in Forest Service planning activities as "cooperating agencies," which further strengthens local government participation at the planning table. These governmental decision-making responsibilities constitute a very important connection to the forests and forest management. It's also a tie that is evolving and changing in its nature and structure.

Collaborative planning is being embraced by state, local, and federal agencies alike as the most effective means to better communication and understanding that can lead to better decision-making and stewardship.

Local communities view local involvement in forest issues as important to their economic development and planning efforts. Many local residents believe they should have greater input into forest decisions because these decisions directly affect their livelihoods. Local municipalities have increasingly made public lands a priority in recent years as they tackle the issues that link them to public lands, such as recreation, access, water, fire, and noxious weeds. Many local officials spend a large portion of their time addressing public lands issues. However, local plans are often too basic or narrow in scope to be useful tools in influencing Forest Service planning processes. Local planning efforts need improvement to adequately address public lands and natural

resources and to effectively collaborate with the USFS. Unfortunately, most local governments do not have the staff and financial resources they need to improve their planning capacity.

Similarly, American Indian tribes in this study area would like to participate more in public lands and resource planning, and wish to strengthen their relationship with land management agencies. Like other local governments, they often do not have the personnel or finances to do so. In addition, American Indian values regarding the land have shaped a unique attitude toward land planning. These tribes have expressed interest in a more collaborative approach to working with the USFS, recognizing the establishment of personal relationships as the most important step to reaching mutual goals.

Other agencies and entities involved in planning that affects forest resources include state agencies such as GOPB and the Division of Wildlife Resources, as well as other federal agencies like the Environmental Protection Agency and the US Fish and Wildlife Service. While the respective commissions of these agencies were granted with the intention of protecting the public interest, in practice their numerous regulations can often be at odds with one another and make it difficult, if not impossible for the Forest Service to meet all their requirements and still create an effective management plan. Better coordination and improved relationships between these numerous agencies is clearly needed.

Primary Decision-Making Findings

- Local planning efforts need improvement to adequately address public lands and natural resources and to effectively collaborate with the USFS.
- Utah tribes would like to improve their involvement in forest management to achieve mutual goals.
- Better planning tools and technical support can improve coordination between local and USFS planning.
- Better coordination is needed between the numerous agencies that have authority over various resources found on the forest and that affect local communities.
- Forest planning is a complex process involving numerous people, groups, and agencies with a variety of interests, and is often legally constrained.
- Collaborative planning is being embraced by state, local, and federal agencies alike as the most effective means to improving the communication and understanding that can lead to better decision-making and stewardship.

Just as the ecosystems the Forest Service manages are intricate, various interests and issues combine to make forest planning equally complex. Forest planning attempts to incorporate the often conflicting wishes of numerous people, groups, and agencies into the legal and policy framework that regulates the Forest Service. It is common for many interest groups to disagree with Forest Service proposals and decisions. They frequently resort to political and legal means to shape forest decisions.

Many stakeholders, including local residents and Forest Service employees, expressed frustration with the delays, lawsuits, and procedural hurdles that often make planning and implementation ineffective. There also is a general sense that planning needs to be more dynamic and adaptable to change as peoples' needs, and the resource changes. Many people linked to the forest want to be more involved in planning but the process needs to be accessible. An important part of this is building relationships between different stakeholders

and Forest Service staff, as well as between the stakeholders themselves. Collaborative planning is being embraced by state, local, and federal agencies alike as the most effective means to better communication and understanding that can lead to better decision-making and stewardship.

Use Linkages

Providing for multiple use of the land is well established in the statutes, regulations, guidelines, and policies governing the management of forest lands, and is one of four main goals in the USFS' current strategic plan. Multiple-use generally refers to the particular physical resources that people use. Thus, people commonly talk about multiple-use in terms of using public lands for water production, grazing, timber harvesting, seed gathering, hunting and fishing, mining, and recreation. The approach used in this study, describing "use linkages" to public lands, is slightly different. It categorizes uses based upon the legal agreements that define how people are allowed to use the land. Thus, the three basic categories of use linkages are: general uses (authorized uses that do not require a permit); permitted uses (authorized uses that require a permit); and, illegal uses (uses that are not authorized or that violate permit agreements).

General access uses are the fastest growing on forest lands; and the most difficult to monitor and manage.

General access uses generally involve visitation and recreation where people access the forests for their own enjoyment. These constitute the largest category of uses and include uses as varied as: ATV riding, backpacking, bicycling, bird watching, camping, climbing, exploring, family gatherings, hiking, horseback riding, jeep touring, mountain biking, nature study, peak bagging, photography, picnics, pleasure trips, relaxing, rock climbing, scenic drives, skiing, cross-country skiing, sledding, dog sledding, snowboarding, snowmobiling, snowshoeing, solitude, tubing, visiting historic sites, walking, wildflower viewing, and wildlife viewing.

General access uses are managed through a variety of means, such as forest planning, rules and regulations, public education, interpretation and signage, the strategic placement of infrastructure, and controlling or directing access. Access and the freedom to move about the forest are frequently critical to these activities and therefore access issues are some of the most controversial in the forest plan revision process. General access uses are typically allowed as long as they are not subtractive, meaning one person's use does not subtract from another person's use. The three forests included in this study are experiencing increasing use pressures, and some general access uses may no longer be non-subtractive.

General access uses are the greatest challenge facing forests today and the Forest Service has identified unmanaged outdoor recreation as one of its most pressing national problems. These activities are difficult to control because they have historically been managed in a more passive manner and because the uses have changed dramatically in recent years. They are also difficult to assess because data is only occasionally collected on these users. This is triggering a discussion on the need to track and manage unregulated general access uses, particularly for recreation.

Aside from visiting and recreating for personal enjoyment, most activities on forest lands require a permit. Activities that entail resource extraction or management, or that allow access for some users while excluding others, generally require permits. These uses can be either commercial or non-commercial. Permits are required to engage in uses such as timber harvesting, grazing, hunting, fishing, gathering or removing firewood and forest products, water diversion and storage, or mineral development. Permits are also required for special uses that generally involve placing and maintaining structures or facilities on forest lands or providing services to other users of those lands.

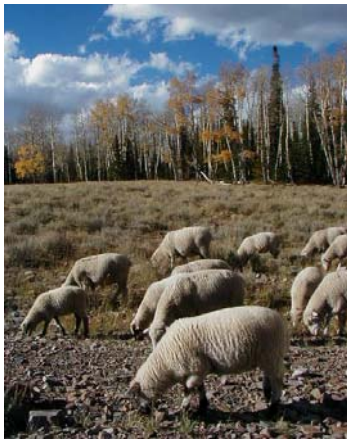
Permits have been implemented in many instances where resources are scarce, or where resource degradation has occurred, as a tool to limit access and more effectively manage resource usage. Permitted uses are controlled for three interrelated reasons: to monitor the physical impact of the use to the land and its resources; to allocate the social and economic benefits of resource use to particular users (when general access is no longer viable); and to collect fees for the use of these resources. Written agreements generally define privileges and responsibilities associated with a permitted use, and specify when, where, and how, and under what conditions that use can occur. Permits effectively manage or allocate resources in agreement with overall forest goals and assign personal responsibility for actions undertaken with a permit. Permitting of new uses could also be used to increase the accountability of users, serving as a contract between the user and the forest to encourage better stewardship. Permits are also used to track and analyze data to guide planning and decision-making. Improving the permit recording process, particularly in the Forest Service INFRA database system, would dramatically increase the value of the information for planning and social analysis, with very little additional cost or effort.

Primary Use Linkages Findings

- Providing for multiple uses of the land is a well-established policy, and is one of four main goals of the USFS' current strategic plan.
- Access to the National Forests is the one privilege upon which all other use privileges are based. This explains why access issues are the some of the most controversial issues in the forest plan revision process.
- General uses that do not require a permit constitute the majority of uses on these forests, but they are not well-monitored or closely managed. Increasing use pressures, especially general uses, are beginning to interfere with other uses and may cause some management changes.
- Aside from personal enjoyment uses, most activities on forests require a permit. These permitted uses tend to be more established, better managed and monitored, and permittees tend to have high expectations for maintaining existing uses.
- Illegal uses that are not authorized or that violate permit agreements are not well-tracked and threaten the existence of legal uses.
- The ability to manage, assess, and monitor uses is greatest for permitted uses. Permitting may eventually become necessary for some general uses in order to better manage them.
- Because of the sheer number of uses and users of National Forest System lands, analyses of use linkages should be resource-based, site-specific and/or issue-focused.

Many traditional and economically-based uses of the forest require permits. Many of these uses also have economic investments or risks tied to them. As established and legally recognized uses, many permit-holders feel their rights to certain uses and access should have greater weight than less-established uses.

The final use linkage category is illegal use. There are three different types of illegal uses on forest land. The first type of illegal use is one which is either not authorized by law or is expressly forbidden. The second type of illegal use is when a use requires a permit that the user has failed to obtain. The third type of illegal use is one which is appropriately permitted but the permit holder has violated some of the conditions of that permit.



Permits have been implemented for many forest land uses to allocate limited resources and monitor environmental impacts.

Illegal uses of forest lands are very hard to document. Sometimes they are contained in the incident reports of Forest Service enforcement officers and in the files of cooperating enforcement agencies such as local police. Other illegal uses are evidenced by the damage that they leave behind, such as archeological theft, campground vandalism, OHV tracks through riparian areas, illegally cut timber, or overgrazing. Many times, the damage itself goes undetected and the responsible party cannot be identified. Illegal activities often threaten the continued existence of legal activities. For example, riding ATVs illegally off-trail threatens the privilege of ATV riding of even those who follow the rules. Addressing illegal uses of forest land and resources requires that the public take a more active role in helping to manage the land that it jointly owns and in exercising stewardship over that land.

This review of uses revealed that growing demand for a limited resource is a primary challenge of the forest. Allocating and controlling uses is a primary task of the USFS.

Illegal uses on forest lands are not well documented or monitored.

The ability to manage, assess, and monitor uses is greatest for permitted uses. Managing, assessing, and monitoring general access and illegal uses is very difficult because the users are unknown to the USFS, data on these uses are hard to obtain, and management approaches are much more indirect. Monitoring and assessment of uses is critical to management decisions, but because of the sheer number of uses and users, analyses of use linkages should be resource-based, site-specific and/or issue-focused. Such analyses are most useful when done on a strategic basis as information needs arise.

Interest Linkages

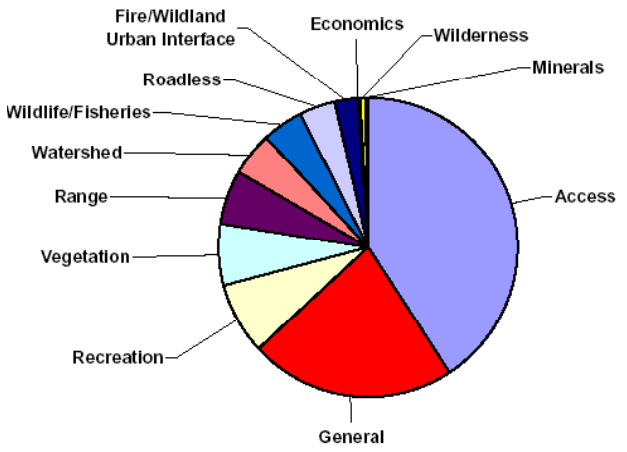
Interest linkages describe ways that people are linked to forest lands through their joint ownership of these lands as American citizens and through special concerns they have over how it is managed. Stakeholders come from a variety of different interest groups and locations, often quite distant from the forests. Involving everyone concerned in

forest planning and building relationships with them is as difficult as devising solutions to accommodate their desires.

People and groups with special interests in these forests frequently have very different opinions about how the Forest Service should manage these forests and how it should revise the forest plan. There are differences of opinion concerning the philosophical basis for forest management, what should be contained in a forest plan, how to prioritize particular uses and users, which areas should receive special designations that would put conditions on use, what analyses the Forest Service needs to conduct, and recommended management actions. These differences of opinion become apparent in several key, inter-related issues that are driving public debate over the future of these forests.

Major issues of concern to people interested in these three forests include: forest health; social and cultural values and attachments to these forests; access to forest lands, recreation and its management, vegetation manipulation, watershed protection, managing wildland-urban interface issues, allowing for multiple use of the land (including commodity production), managing conflicts between various user groups, and coordinating with local and tribal governments on land and resource management issues. These are illustrated in *Figure 6*; an example from public comments to the Manti-La Sal National Forest.

Figure 6: **Manti-La Sal Public Input Issues**



Source: Manti-La Sal Public Comments regarding Plan Revision, 2003

The key underlying issue over which various interests disagree has to do with the *future vision* for these forests. Some people see these forests as working landscapes and believe that people can continue to use and enjoy them without fundamentally impairing them for the future. These people generally support a forest plan based upon a multiple-use, sustained-yield approach. Other people view these forests as preserves for maintaining natural ecosystem functions and biological diversity, and support a more conservation and ecology-based forest management plan that limits human access to, and use of, forest resources. These various, and often contradictory values shape diverse recommendations for management.

A second key issue is *forest health*. Many observers agree that these forest systems are currently unhealthy, but there is much debate on what factors led to their current states and what needs to be done to remedy the situation. Some attribute the problem to legal and procedural obstacles to forest management and advocate active human management strategies. Others blame past management interventions such as fire management and predator control for the problems and they advocate a "hands-off" approach to future management—letting nature take its course.

A third key issue concerns *social and cultural values* associated with these forests. Some

interests see people as a part of these forests and forests as an integral part of the way of life in local communities. Other interests see these forests primarily as an opportunity to fulfill an obligation that people have to protect other living things and preserve some areas of the earth from human impacts.

A fourth set of issues concerns which human uses should be allowed on these forests. The most controversial issue appears to be *motorized recreation and OHV use* on the forests, since this involves a significant change that has occurred in recreational use of these forests. Other controversial human use issues are *grazing* and *predator control*, reflecting a debate over how much humans should be allowed to interfere with natural systems to benefit human economic and recreational uses.

This is just a sampling of issues from the many that are likely present. Finding complete information on interest linkages is difficult because the sources of information are diffuse, sometimes difficult to access, and very large in number. One avenue for identifying special interests is by searching the internet, a popular communication tool among interest groups. Internet web sites contain useful and often detailed information articulating the concerns and views of groups with special interests in forest management. Public meetings, workshops, and comment files are also useful. These two tools were used to conduct the brief sample included in this study.

Primary Interest Linkages Findings

- Interest Linkages describe ways in which people link to forests through their joint ownership of those lands and through special concerns they have over how that land is managed.
- Major issues of concern to people interested in these forests include: forest health, social and cultural values and attachments, access, recreation, vegetation manipulation, watershed protection, wildland-urban interface, allowing for multiple uses, managing conflicts between user groups, and coordinating with local and tribal governments on land and resource management issues.
- There are many different opinions about forest management including its philosophical basis, content, priorities, special designations, necessary analyses and recommended management actions.
- The sources of information on interest linkages are diffuse, very large in number, and sometimes difficult to access. Internet and USFS meeting notes and public comment files were used for this cursory overview.

American Indian Linkages

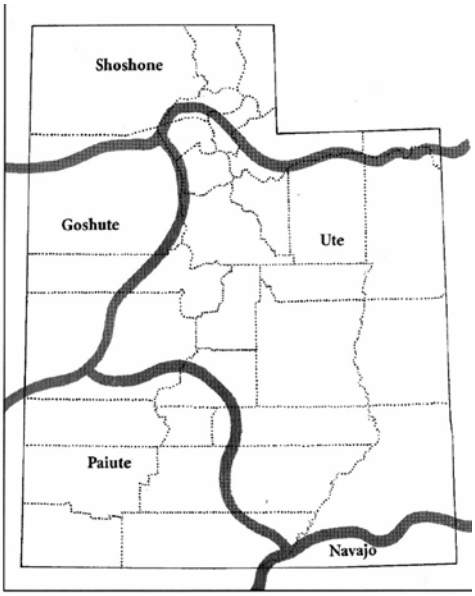
American Indians living in Utah and surrounding states are descendants of people who originally occupied these lands. American Indians known to have inhabited this region prior to Euro-American settlement are the Ute, Piute, and Navajo, and Hopi, as shown in *Figure 5*. The continuous relationship with the land created deep ties to the Forests. Overlapping use of the Forests also created some traditional ties between the different American Indian tribes.

American Indian tribes were moved off ancestral lands with the arrival of Euro-Americans settlers. Over decades of settlement and government-backed programs intended to "modernize" American Indians, tribes lost much of their traditional land base. These efforts also forced dramatic changes in tribal communities and culture. Today, many American Indians trace much of their current despair and dysfunction to lost land and culture. A

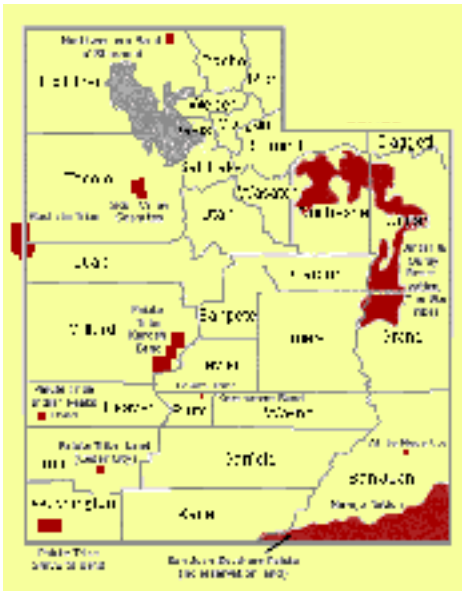
weakened relationship to the land eliminated many subsistence activities and limited economic opportunities. Lost cultural ties and traditions weakened community health, well-being and hope for the future. The poverty and unemployment crisis of many tribal communities today is traced to these impacts. Today, job creation is the highest priority for Utah American Indian nations.

Historically, most American Indians living in Utah relied on an indigenous subsistence pattern of gathering wild plant foods, supplemented by hunting and fishing. The Southern

Figure 5: **Historic and Current Utah Indian Tribal Territories**



Source: A History of Utah's American Indians



Source: UDIA

Paiute also adopted forms of agricultural cultivation. Certain plants and wildlife were essential for survival and still play sacred roles in tribal communities today. The worldview of many American Indians integrates both the physical and spiritual world. It places special emphasis on sacredness of the natural world. The areas inhabited by these species are important and often sacred to tribes. Preserving and restoring land, wildlife, and natural resources as a sanctuary for spiritual and cultural renewal is important to cultural preservation and ultimately, tribal wellness.

American Indians' traditional values regarding land and the natural world can be described as a bioregional or systems worldview. This view takes a sweeping view across large landscapes and encompasses not only its visible physical aspects, but also less apparent values, such as relationships and spirituality. A broad systems approach is prevalent in new scientific attitudes toward natural resource and landscape planning. Tribes believe that land managers can learn from the American Indians' perspective. Such sharing of American Indian scientific understanding makes opportunities for cooperation more appealing to tribes.

Tribes would like to participate in Forest lands and resource management planning, and wish to strengthen their relationship with the Forests. Culturally-aligned employment and

education opportunities with the Forest Service are primary goals of their participation in forest planning. However, tribes often do not have the staffing or finances to participate effectively in planning. They also do not always feel welcome in planning forums with other organizations and feel their contributions do not hold the same value and influence as other collaborators. They are more willing to participate when they have funding and feel they have equal footing. Such hesitancy is often frustrating to other organizations, but building good relationships can help overcome this.

Additional tribes concerns are the establishment of rights and claims over land and resources.

Primary American Indian Linkages Findings

- Utah's American Indians are descendants of people who originally occupied the lands of Utah. This continuous relationship with the land has created deep linkages to these Forests.
- Utah's American Indian people trace much of their current despair and dysfunction to a loss of land and culture over the past 150 years, often imposed by government policy. The American Indian poverty and unemployment crisis is interrelated with the weakened relationship to the land and lack of economic opportunity.
- Certain plants and wildlife were historically essential for survival and play sacred roles in tribal communities. Managing and restoring land, wildlife, and natural resources for spiritual and cultural renewal is important to cultural preservation and ultimately, tribal wellness.
- American Indians' traditional values regarding land focus on a bioregion/systems view or "worldview." This approach is relevant to new scientific attitudes toward natural resource and landscape planning. Land managers can learn from the American Indians' perspective.
- Utah tribes would like to participate in public lands and resource planning, and wish to strengthen their relationship with these planning agencies, but often do not have the staffing or finances to do so. Tribes are more willing to participate when they have the same capacity as other collaborators.
- Job creation is the highest priority for Utah American Indian Nations. Culturally-aligned employment and education opportunities with the forest are primary goals of participating in forest planning.
- Statutes, regulations, and case law decisions have a far more reaching impact on American Indians today than do treaties. Federal statues are particularly important because Congress can unilaterally abrogate treaties. Case law, which interprets and construes treaties, statutes, policies, and procedures of government agencies, is more important to tribes. Some issues concerning tribal rights are still unclear and are being legally determined.
- Utah American Indian tribes have a unique relationship to other government entities. They are distinct because they are sovereign nations with historic treaties and executive orders. This government-to-government relationship requires the USFS to establish and maintain formal consultation agreements with tribal governments. Consultation should involve all aspects of forest decision-making.

American Indian tribes have a unique relationship to other government entities as sovereign nations. This relationship requires the Forest Service to establish and maintain formal consultation relationships with tribal governments. Many issues concerning tribal rights are still unclear and are being legally determined. Numerous rulings have already extended many rights to public lands and resources, but these rights are often not fully exercised because tribal members are not always comfortable doing so in light of other uses that may be occurring in the same locations. Thus, an extra effort needs to be made to help American Indian tribes feel comfortable in exercising their rights of access and use of Forest land and resources. Tribes also want to be included in discussions that go beyond their established legal rights, such as ancestral remains and sacred sites. They would also like to be heard in matters shared by other forest stakeholders, such as economic impacts, habitat preservation, and water quality.

CONCLUSIONS

Collaborative Planning

The social and economic interests of people and their linkages to the forests—many of which are conflicting— present significant challenges to the management of the forests. The Forest Service is expected not only to manage the relationship between people and the land, but in many cases, the relationship among different groups of people with diverse interests and needs.

These issues don't lend themselves to purely scientific analysis. The extent to which the Forest Service can better understand these interests and their underlying motivations, the better will be its ability to address them. The Forest Service cannot address these issues solely within the vacuum of Forest Service planning because these issues are driven and affected by many changing factors beyond the influence and jurisdiction of forest managers. Further, different people involved in Forest Service planning need to see their own ties to the forests in relation to those of others in order to work together toward a shared future vision for the land.

Many stakeholders in this assessment process expressed a sense of being separated from the very decisions that affect their communities and lifestyles. They would like to have a greater influence in decision making. Many local officials and tribes spend significant time and resources on public lands issues, but often feel limited in their effectiveness. Throughout this assessment, people linked to the forests expressed a strong desire to be involved in a meaningful way in planning, management, and stewardship of these lands.

The logical conclusion, therefore, is that Forest Service engagement in collaborative planning processes is essential. This means much more than inviting input into forest planning processes. It implies deeper and more direct participation by stakeholders. It implies that forest planners should also be more active participants in local, state and other planning processes. It also implies that these non-forest planning processes need to be more sophisticated in nature and more inclusive of various stakeholders and ideas at the planning table. In order for this happen, there will need to be a significant new degree of emphasis and commitment to collaborative planning on the part of both the Forest Service and its potential planning partners.

Collaborative planning is being embraced by state, local, and federal agencies alike as the most effective means to improve the communication and understanding that can lead to better decisions. The Forest Service has some experience with collaborative planning, but it has yet to become standard practice. The forest plan revision for these three forests is utilizing many collaborative planning approaches to better involve people in their revision process. Communities and tribes in the area, on the other hand, have only begun to understand the potential of collaborative planning and have only been participants in a handful of cases.

The Forest Service is still preparing itself to more fully engage people. It will also take time for different parties to build their planning capacity to more effectively participate in the process. The processes used in the current forest plan revision and this social-economic assessment are important steps in modeling and engaging people in ways that will lead to better collaboration.

Linkages to Public Land

Even as this assessment began, it was clear that the social and economic issues are far too complex for any document to be a full assessment of every concern people have related to the forests. They are also too far reaching to be encompassed within simple geographic boundaries. Thus, an important goal for this assessment was to develop a framework for approaching and thinking about how people are connected to the forest, which could then be applied to specific issues and concerns as needed.

One of the most unique and important aspects of this assessment is the potential to create a new tool for better planning and decision making using the Linkages to Public Lands Framework.. This “Linkages” framework helps identify, analyze, and categorize the various types of linkages that people have to the forests. It provides a systematic process for analyzing a matrix of people and entities and their linkages to forest resources. It also reveals the different linkages in relation to other people’s linkages to these forests, establishing a clearer foundation for discussions about prioritizing them. This allows for a much better social analysis to be conducted throughout planning processes as specific issues and potential alternatives are being developed.

The Linkages framework also establishes a way to think about and collect data that can be used to make these decisions. The Forest Service has long recognized the importance of data collection, surveying, monitoring, and evaluation to improve decision-making. They have also recognized a need to plan and manage in a more responsive manner, learning from past efforts and adjusting quickly to new trends. Such “adaptive” planning relies on current and reliable data, but this assessment uncovered an obvious shortage of current and reliable data relating to social issues. This framework helps strategically pinpoint data for the task at hand to quickly change management practices and boost the effectiveness and responsiveness of planning.