

Appendix I
Recreation Demand Analysis

I. Recreation Demand Analysis

The Sequoia National Forest is unique in its juxtaposition to Los Angeles, San Bernardino, San Francisco, and San Diego, and the metropolitan areas of Fresno, Sacramento, Bakersfield, and Las Vegas, Nevada. Over 28 million people live within a half-day's drive of this urban forest. The San Francisco Bay Area, Sacramento, San Diego, and Las Vegas are all located within a half-day's drive. Approximately sixty percent of the forest's visitors are estimated to come from the Los Angeles Basin, which is located within a 3-hour drive. More than two million people live within an hour's drive from the forest. While all of these people are potential visitors to the Giant Sequoia National Monument, numerous other recreation opportunities in these areas may also attract this population base.

Recreation use of the Sequoia National Forest has been estimated at 10-13 million visits a year, which is more than Sequoia-Kings Canyon and Yosemite national parks combined. Use at the three districts that comprise the Giant Sequoia National Monument was over half of the forest total, according to one estimate in 1996 (use in the monument would be less than this, because some district lands are not included in the monument). The National Visitor Use Monitoring methodology will be employed on the forest in 2003, which should yield more accurate visitation figures.

The Sequoia, Inyo, and Sierra national forests account for 45% of all recreation visitor days on National Forest System lands in the Sierra Nevada. Together with the adjacent national parks, this portion of the Sierra Nevada probably has one of the highest recreation activity levels in the world (SNEP). This area of the Sierra Nevada will also experience the largest population growth in nearby urban areas, particularly Bakersfield and Fresno, during the next few decades.

The Sequoia sees a great deal of diversity in its visitors. The forest's large numbers of visitors are multicultural, especially Hispanic and Southeast Asian, many of whom are locally based. International visitors, who are drawn to the giant sequoia groves, frequently tour the forest. Recent school studies found that people in this area speak over 26 languages. A few of the cultures within the forest's zone of influence include Native American, Hmong, Laotian, Filipino, Japanese, Chinese, and numerous cultures related to Spanish speaking countries, ranging from Mexico to South America. Each of these cultures has unique demands for and values toward the use and management of the Sequoia National Forest.

Visitor use patterns vary tremendously from the north end of the forest to the south. More people from the Bay Area and international visitors tend to visit the Hume Lake District than other parts of the forest. People from the Los Angeles Basin visit the forest's southern portions, especially the Kern Canyon, Lake Isabella, and the Kern Plateau. The Kern Valley is beginning to market itself as a gateway to the national monument, which will increase the likelihood of more monument visitation from the Los Angeles Basin. A German tourist guide leads visitors up the Kern Canyon into the monument, along the Western Divide Highway to the Trail of 100 Giants (an accessible interpretive trail in a

giant sequoia grove), and then to other tourist destinations outside the forest. Local residents tend to visit portions of the forest and monument that are closest to their residences.

The multinational forest users have different expectations for their recreation experiences than those of the traditional forest user. These expectations vary from place to place, because of the different use patterns. What works in one area of the forest cannot be assumed to work in other areas. The multinational visitors also provide a challenge in effective communications.

The monument is located both north and south of Sequoia-Kings Canyon National Parks. Visitors to the Hume Lake District must drive through the national parks, in order to access much of the district. People frequently do not realize if they are in the park or the forest and are confused when confronted with the different policies and types of facilities found in each place. Some people are attracted to the park, but camp in the forest, because they prefer the forest's facilities.

In determining demand for recreation in the future, it is useful to look at current recreation participation patterns. What is currently occurring forms a baseline for estimating what might happen in the future. In addition, when people are asked what activities they would participate in if opportunities were available, comparing those responses to current behavior can be useful. What people say they would participate in does not necessarily equate to what they actually do. For example, if people say they would go camping if more opportunities were available, but do not camp now, even though opportunities are currently available, they still may not camp in the future if more opportunities are provided. The difference between what someone says they would do and what they actually do can be attributed to a number of reasons. First, people may simply think it would be nice to do something, but never actually follow through with the action. Limitations on time, disposable income, transportation, health, family needs, and traveling companions, as well as fear of the unknown or perceived crowding are some of the factors that could affect a person's recreation participation.

Crowding can affect how and when people visit an area. Some people do not mind crowds and, in fact, crowds can positively influence their recreation experiences. Many others, however, find that crowding adversely affects their recreation experiences. Consequently, they may avoid visiting areas when they perceive the areas will be more crowded and shift their visits to other areas, other times of the week, or seasons of the year. If people perceive that areas are always crowded, they may simply avoid visiting them altogether.

More people are becoming interested in outdoor recreation activities. Recreation is a prime lure for attracting visitors from overseas, and it is a growing factor in travel and residency patterns. The availability and proximity of recreation opportunities affects how much people recreate, as well as their choice of activities.

California is the most visited state and is the eighth most visited place in the world. International tourism is expected to increase in the future. Natural resources and outdoor recreation play an important role in tourism, as they provide the settings for travel activities

and experiences. The monument already sees a substantial number of international visitors, and they are expected to increase in the future.

Various studies have found that recreationists are generally satisfied with their available recreation opportunities. However, they continue to be concerned with the availability of clean restrooms, safe drinking water, and information (directional signs, information on conditions and hazards, and interpretive information). Safety and security are of more concern in some areas and among some populations, such as Hispanics.

Outdoor Recreation in America, 2001, is a report on the eighth national survey in an annual series for the Recreation Roundtable by Roper Starch Worldwide. The survey is not specific to recreation on national forest lands. The survey found a broad increase in outdoor recreation participation, with 20 of 37 activities showing a percentage increase over the past twelve months. The sharpest climbs were in wildlife viewing (up 4%), hiking, running/jogging, and motorboating (each up 3%). Half reported a visit to a federal recreation site over the past two years.

The 2001 Roper Starch survey shows a decrease in the frequency of participation. The 2000 survey showed that 78% of all American adults took part in an outdoor recreation activity at least monthly, and 34% did so several times each week. The 2001 survey shows a drop to 70% taking part at least monthly and only 26% several times weekly.

The reduction in frequency is roughly balanced by gender, according to the 2001 Roper Starch survey. The reduction is more pronounced in the 18 to 29-year-old age group, where participation dropped to nearly the same as 30 to 44-year-olds. This statistic is important, because, historically, individuals in the 18-29 age bracket are much more active outdoors than those who are older. If those born between 1972 and 1982 continue to live a less active life, their lifestyles will affect not only their health, but also business and government serving their needs. The drop was also greater among higher income Americans (43% to 31%). The decline in frequency of participation was very strong among Internet users, who reported a several times weekly participation drop of 17%, versus an 11% drop for the public overall. Households with children showed a less pronounced drop.

The 1994-1995 National Survey on Recreation and the Environment (NSRE) is one of a continuing series of national recreation surveys, conducted periodically by the federal government since 1960. The survey is not specific to recreation on national forest lands. Outdoor recreation activities were grouped into 13 basic types for the survey. People 16 years and older were surveyed. Over the years, the survey has noted an increase in participation, although participation rates vary greatly across different demographic strata. In the 1994-1995 survey, 94.5% of the population participated in some activity during the previous 12 months. The most popular activities were walking (66.7%), viewing a beach or waterside (62.1%), outdoor family gatherings (61.8%), and sightseeing (56.6%). The most popular types of recreation included viewing and learning activities, such as birdwatching; trail, street, and road activities, such as biking; social activities, such as picnicking; spectator activities, such as attending an outdoor concert; and swimming. Similar to a 1997 California survey, for the most part, these activities are relatively low cost, can be pursued without a great deal of physical exertion, and do not require special equipment or skills. Most of these activity types remain popular with Americans past the age of 60.

Places that can be used for casual activities, such as walking, family gatherings, sightseeing, and visiting beaches, historic sites, and other sites of interest are most in demand for a broad spectrum of Americans. Viewing and learning, socially oriented activities, and swimming are the most popular forms of recreation, with natural and historic settings contributing significantly to recreationists' expectations. Participation is increasing at all types of settings and for all segments of the population, with some more than others. Growth seems particularly strong for viewing and learning activities and for new activities (Cordell, et al.). More uses continually come into vogue that must compete with existing uses for a limited land base.

The trend is generally away from consumptive uses (e.g., hunting, fishing) to non-consumptive uses (e.g., wildlife viewing). Water-based recreation is increasing. Heritage, nature, and educational travel are increasing. Scenic driving, which is always popular, continues to increase.

In the Pacific Coast region, which includes California, participation is expected to increase over the next 10-20 years in all activity groupings (winter, water, wildlife, dispersed land, and developed land). An exception within those groupings is hunting, which is expected to have decreasing participation. Although fewer people are expected to participate in hunting, the number of days that people hunt may increase slightly (Cordell, et al.).

Of all the regions nationally, the Pacific Coast will see the largest number of activities for which primary purpose recreation trips grow faster than the rate of increase predicted for the population (about 13 out of 22) from now until 2050. This region will also have the most activities (75%) for which participants grow at a rate faster than the population. Activity days should also increase faster than population growth for about 60% of the activities (Cordell, et al.).

The state of California conducted a survey on recreation in 1997 (*Public Opinions and Attitudes on Outdoor Recreation in California 1997*; An Element of the California Outdoor Recreation Planning Program, March, 1998.) The survey results apply to recreation areas operated by all levels of government and are not specific to the Forest Service. 82% of Californians believe that outdoor recreation areas and facilities are "important" or "very important" to their quality of life, although 37.1% spend less time in outdoor recreation activities than they did five years ago.

The 1997 California survey asked about five broad types of outdoor recreation areas: natural and undeveloped areas; nature oriented parks and recreation areas; highly developed parks and recreation areas; historical or cultural buildings, sites, or areas; and private, not public outdoor recreation areas and facilities. The largest percentage of respondents visited nature oriented parks and recreation areas, followed closely by natural and undeveloped areas. Highly developed areas are visited with the greatest frequency.

In the 1997 California survey, 92.5% expressed agreement (moderately agree or strongly agree) with the statement, "Protection of the natural environment is an important aspect of outdoor recreation areas." 94.2% expressed agreement with the statement, "The quality of the natural setting is an important factor in my enjoyment of outdoor recreation areas." 60.7% expressed agreement with the statement, "Additional campgrounds should be

constructed that are more developed and have hot showers, including campsites for which there would be an extra fee with hook-ups for electricity and water.”

The 1997 California survey reported that almost 60% of respondents indicated facilities are too crowded when they want to use them. Within the monument, we know that some areas are filled to capacity, at times, especially on holiday weekends.

The 1997 California survey questioned people on their participation in 43 activities. Participation appears to be higher for activities that are less expensive, require less equipment, and need fewer technical skills. The largest percentage (84.8%) engaged in walking, while the lowest (2.5%) participated in snowmobiling. Other activities that typically occur on national forests and their rankings include:

- Visiting museums, historic sites (2);
- Driving for pleasure (4);
- Beach activities, including sunning and games (5);
- Picnicking in developed sites (7);
- Trail hiking (8);
- Attending outdoor cultural events, like concerts, theater, etc. in outdoor settings (10);
- General nature study, wildlife viewing (11);
- Camping in developed sites with tent or vehicle (13);
- Fishing—freshwater (17);
- Camping in primitive areas and backpacking (20);
- Other non-mechanized winter sports activities—sledding, snow play, ice skating (21);
- Mountain biking (not on paved surfaces) (27);
- 4-wheel drive vehicles used off paved roads (31);
- Horseback riding (32);
- Mountain climbing (36);
- Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads (37);
- Hunting (38);
- Cross-country skiing (40).

The number of days people participated in activities was also recorded in the 1997 California survey. People participated in walking for the most number of days (74.3 days). Other activities with frequent participation included driving for pleasure, use of open grass areas, bicycling, and nature study/wildlife viewing. Many of the activities with low participation rates appear to have avid participants. For example, 8.7% participate in hunting, but they do it for an average of 20.9 days.

In order to determine unmet demand, the 1997 California survey asked respondents to identify and rank the top 10 activities in which they would most probably increase participation if good opportunities were available. The rankings were weighted and grouped into high, medium, and low. Thirteen activities were ranked as having high unmet or latent demand. Of those that ranked high, the following activities typically occur on national forest lands: trail hiking, general nature study, freshwater fishing, beach activities, visiting historic sites, attending outdoor cultural events, camping in primitive areas, and picnicking in developed sites. Unmet demand was moderate for horseback riding and low

for driving for pleasure, mountain biking, hunting, motorcycling, 4-wheel driving, other non-mechanized winter sports, cross-country skiing, and snowmobiling.

The 1997 California survey respondents were also asked to rank the top 10 activities to which the government should give the highest priority when spending public money (public support). The results were again weighted and grouped into high, medium, and low. A number of activities that typically occur on national forest lands ranked in the high category. Camping in developed sites ranked highest, followed by trail hiking. General nature study/wildlife viewing, visiting historic sites, picnicking in developed sites, and camping in primitive areas/backpacking also ranked high. Public support was moderate for attending outdoor cultural events, beach activities, and freshwater fishing. Support was low for motorcycling, mountain biking, driving for pleasure, horseback riding, hunting, 4-wheel driving, other non-mechanized winter sports, cross-country skiing, and snowmobiling.

In order to assess recreation needs, the 1997 California survey combined the results of the unmet demand question with the results of the question on which activities should have the highest priority for the expenditure of public funds (public support), with more importance given to the public support aspect. The result was a matrix, with each activity given one of nine rankings. Nine activities were in the top priority level; those that typically occur on national forest lands include trail hiking, camping in developed sites, camping in primitive sites, general nature study, picnicking in developed sites, and visiting historic sites. The need for additional opportunities for the following activities was ranked quite low (8 or 9): mountain biking, driving for pleasure, horseback riding, hunting, cross-country skiing, other non-mechanized winter sports, snowmobiling, motorcycling, and 4-wheel driving.

Given limited agency budgets, the 1997 California survey respondents were asked what were priority items for changes in funding. Californians want increased spending for rehabilitation and modernizing existing facilities (68.3%); for protection and management of the area's natural and cultural resources (67.6%); for basic maintenance of existing facilities (64.8%); building new facilities (57.5%); acquiring additional land for recreation (57.1%); and providing educational and activity programming (53.2%).

People's attitudes toward changes in facilities and services were also surveyed in the 1997 California survey. People wanted more educational programs (68.6%); more simple campgrounds (with picnic tables, cold water, and restrooms) (76.9%); more intensely developed campgrounds with hot showers (59.8%); and more horseback riding, hiking, and/or mountain biking areas where no motorized vehicles are allowed (76.0%). 36.8% wanted more areas for the legal use of off-highway vehicles; 37.6% wanted more RV sewage dump stations; 47.4% wanted more picnic sites that can handle large groups; and 51.9% wanted more parking areas at day use picnic areas. More Hispanics wanted additional picnic sites for large groups (76.8%) and more parking at picnic sites (83.9%).

People have a number of motivations for participation, which influence enjoyment of their recreation experiences. In the 1997 California survey, the factor considered most important to most people (86.9%) was just being outdoors. Relaxing, releasing and reducing tension, beauty, and quality of the natural setting were also very important for enjoyment. Meeting new people was the least important factor, except for Hispanics.

The Hispanic population will continue to grow during this century, which will greatly influence recreation participation. According to a 1995 census report, 10 million international immigrants will come to California by the year 2020, which would be about 60% of the state's population increase during this period. The state's Hispanic population will increase from 8 million to 17 million people. If these projections are accurate, approximately 30%-35% of California's population will be Hispanic at the end of this period. According to one researcher (Dwyer, 1994), minorities are projected to account for 75% of participation growth in backpacking, birdwatching, hunting, day hiking, tent camping, walking for pleasure, and picnicking.

Hispanic recreation participation patterns are somewhat different from predominantly Anglo populations. Hispanics have different preferences in activities and types of areas visited. According to the 1997 California survey, they are more likely to prefer highly developed areas, excluding historic and cultural areas. Fewer Hispanics visited natural undeveloped areas than members of other ethnic groups; 20.6% of Hispanics did not visit such areas at all, while only 7.7% of the rest of the population did not visit them.

Motivations for participation may also be different for Hispanics. As noted previously, the 1997 California survey found that meeting new people was more important to them (45.7% versus 15.8% for other ethnic groups). Being with family and friends was very important (83%); a variety of studies have indicated that recreation opportunities that promote family affiliation are important to Hispanics. Feeling in harmony with nature and achieving spiritual fulfillment were also important to more Hispanics than to other ethnic groups.

Several factors, relating to societal, lifestyle, and demographic trends, can affect recreation participation. The aging of the baby boomer generation, income changes, time constraints, changes in family structure, and immigration are examples. For example, people are tending to take more frequent, shorter trips, rather than the traditional 2-week vacation. Many people are looking for opportunities that are close to home. More families and singles are recreating.

As the baby boomer generation ages, the proportion of the population that is elderly will increase. There is a general changing attitude that leisure time is not a privilege, but a right earned by years of hard work. Improved health care, greater emphasis on maintaining lifelong physical fitness, and a changing image of what "old" people can or cannot do are also factors that contribute to greater participation in outdoor recreation and leisure activities. They have more free time available for activities. Some are interested in continuing education and have a strong desire to learn about nature, wildlife viewing, and history/culture, for example. Some people are interested in high-risk activities, and a number of people over the age of 40 are beginning such activities as rock climbing. Not all older people will increase their recreation participation, as health concerns and mobility problems will affect their ability and desire to participate.

Baby boomers are a diverse group. Although seven are turning 50 every minute until the year 2014, millions are still in their thirties. They are entering their prime travel years; 80% of leisure travel is by people over 50 years old. As a group, they are wealthy; in 2010, they will control 50% of disposable income.

Income can affect participation. An example is activities that have a high cost investment in recreation equipment. Some researchers have also noticed that participation is lower in households with very low or very high incomes. Economic recession or prosperity will also affect participation patterns, as equipment sales, travel distance, travel frequency, and activity choices can all be affected by the amount of disposable income available.

The diversity of “family” has greatly changed over the past several years and will continue to do so. Whether by choice or economic necessity, two income households with or without children have become the rule. An increasing divorce rate has created greater numbers of single parent households. Families increasingly may be a blend of adults and children, who may be related by marriage, but not necessarily blood. The number of households with multiple generations is also increasing. A greater number of persons are also living alone, by personal choice, death of a spouse, or divorce.

People have a continuing desire to get away from the stress of everyday life and to enjoy the outdoors. Interest and concern for overall physical fitness, wellness, and improving health are substantial, although a recent report from the Surgeon General found that 60% of Americans are not regularly active, while 25% are not active at all. For young people, physical activity declines dramatically during adolescence. The same report concludes that a variety of medical conditions can be prevented or improved through lifelong moderate physical activity, which will improve the quality of life. The Recreation Roundtable’s *Outdoor Recreation in America* says that Americans see outdoor recreation as a potent tool in attacking societal problems. Those who participate in outdoor recreation are markedly more content with their lives, in general, their families, their jobs, and their physical well-being.

People will continue to have an increasing number of choices on how to spend their leisure time. Recreation areas face competition from a myriad of leisure opportunities, both at home and away. At the same time, the public is developing higher expectations for quality and service. Convenient products and services that give people more time will continue to proliferate. As more people work, they have less time available to do anything else. The importance of convenience will extend to all areas of life, even recreation, as close-to-home recreation will increase in importance. Visitors will be interested in a diversity of activities and conveniences/amenities.

Conclusion

The various surveys referenced found similar results, although the actual percentages were somewhat different (differences could result from the makeup of the sample, differences in activity groupings and definitions, and differences in the wording of questions). However, all surveys project increases in participation for most activities, at varying rates. Participation is expected to increase, at varying rates, across all demographic strata, for all ages and abilities, including persons with disabilities. All surveys seem to indicate a growing interest in viewing/learning activities.

The California survey indicated a need for additional opportunities for specific activities and a desire for greater expenditures for particular purposes.

The diversity of recreationists will continue to increase, as the American population becomes more diverse, and international visitors will increase.

The variety of activities is expected to continue to grow. Some will be determined to be suitable uses for national forest land, and some will not. As more recreation uses occur, they must compete with existing uses for a limited land base.

Participation in many activities that currently occur in the monument is expected to grow in the future, so that the need will exist to create additional opportunities for them. Whatever additional opportunities are provided, they must be provided in such a way that lifestyle and demographic trends are taken into account, in facility design and recreation management, in order to truly serve the needs of the recreating public.

References

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