

1.0 EXECUTIVE SUMMARY

The winter recreation study was conducted in 2001/2002 to characterize winter recreation opportunities, activities, and use in the Big Creek Basin. The study was completed by reviewing existing literature, consulting with winter recreation user groups and agencies, and through the development and implementation of a self-census user survey of winter recreationalists.

The main element of the REC-21 Winter Recreation Study is the Winter Recreation Use Self-Census Survey conducted during the 2001-2002 winter recreation season (November 13, 2001 to May 16, 2002). The survey was administered at recreation sites and business locations from Shaver Lake to Huntington Lake. A total of 378 completed survey forms were received from the study. The results show that the average user group (each represented by one survey form) is made up of 4.6 recreationists that visit the area often and are satisfied with the recreation opportunities and support facilities in the Basin. The most popular winter activities in the area are snowmobiling and snow play and the most frequently used regions are those that remain accessible to automobiles throughout the season. Consultation with agencies and user group representatives through telephone interviews confirmed the results of the winter survey.

2.0 STUDY OBJECTIVE

Evaluate the current uses and future demands of winter recreational opportunities at trails, trailheads and Sno-Parks near Project facilities and nearby recreational facilities.

3.0 STUDY IMPLEMENTATION

3.1 STUDY ELEMENTS COMPLETED

- Identified winter recreation opportunities (Sno-parks, snowmobile routes, ski resorts, and skiing trails) near Project facilities.
- Identified and documented existing winter recreational activities that occurred at or near Project facilities. Identified the uses occurring at the trailheads, trails and Sno-parks (e.g., snowmobiles, cross county skiers, snow shoe hikers).
- Developed a winter recreation survey (Winter Dispersed Recreation Use Survey) to be used to gather data on existing and potential use, factors influencing use, and perceived needs for recreation.
- Met with local representatives of winter recreation user groups to discuss winter recreation activities within the area.
- Identified target areas/sites that would be surveyed.

- Conducted Winter Dispersed Recreation Use Survey at target sites.
- Used data from survey and other appropriate sources to characterize the recreation opportunities and future recreational needs.
- Identified and documented potential improvements to meet existing and future winter recreation uses.

3.2 OUTSTANDING STUDY ELEMENTS

Identify and document potential improvements to meet existing and future winter recreation uses.

4.0 STUDY METHODOLOGY

The winter recreation study identified and characterized winter recreation opportunities in the Big Creek basin. The study included the following components: (1) a literature review and consultation with existing user groups and the SNF recreational specialist to identify winter recreation opportunities; (2) a literature review and consultation to obtain user data at the identified winter recreation opportunity sites; (3) development and administration of a self-census user survey to characterize use at winter recreation opportunity sites; and (4) an evaluation and analysis of data to determine the need for enhancement of winter recreation opportunities.

Forest Service planning documents and regional recreation maps were reviewed to identify winter recreation opportunities near Project facilities and nearby recreation areas. The type of data reviewed included allowable uses, public and private support facilities, winter recreation sites including sno-parks, snowmobile routes, ski resorts, and skiing trails. This data was gathered by reviewing documents and maps describing winter recreation in the Basin published by the USFS, California Department of Parks and Recreation (State Parks), SCE, and special-interest recreation groups.

Agency and special-interest user groups were consulted regarding winter recreation use in the Basin. Additional consultation, in the form of telephone interviews was conducted with agencies and user groups involved in winter recreation in the Project area. These interviews were conducted in the summer of 2002 and focused on user group or agency perceptions of the winter recreation opportunities and needs in the Project area and obtained information on winter recreation activity type and location, frequency of activity and use areas, area conditions, snow depth, weather conditions, and user needs. The interview survey questions were based on questions from the winter recreation self-census survey form. These questions were edited to fit the context of the interview. These interviews were conducted with representatives from the Pine Ridge Nordic Ski Patrol, Sierra Snowmobile Association, the USDA-FS, and SCE. The interview survey forms used and the summarized responses from each interview are included in Appendix A.

Preparation and development of the winter recreation self-census user survey was initiated by the Recreation Working Group in the fall of 2001. The Recreation Working Group selected locations where the self-census survey form would be administered and began the design and development of the survey form questionnaire. A draft survey form was distributed to the working group for review and comment in September of 2001. The group edited and approved the form in October. Implementation of the Winter Recreation Use Self-Census Survey (winter survey) took place during the period of November 13, 2001 to May 16, 2002 and was administered at seven recreation sites, at five local businesses, and by on-site USDA-FS personnel.

The self-census survey was designed to characterize winter recreation activities of all types throughout the Project area. The Project area was divided into eight winter recreation regions. These regions were depicted on maps on the back of the survey form and on the survey kiosks (Figure REC-21-1). The winter recreation regions are Shaver Lake/Camp Edison, Tamarack Ridge/Coyote Trail, Huntington Lake, Kaiser Ridge, High Sierra Station/Mono Hot Springs, Florence Lake, Edison Lake, and Stump Springs Road/Mount Tom.

The winter self-census survey form consists of a background section, a trip survey section, and a historical winter use section. The background section collects information on the size of the group, ethnicity, and place of residence. The trip survey section collects information about the type, location, and duration of the recreation activity; asks the respondent to rate the winter recreation opportunities and support facilities; and provides opportunity for written comments. The historical use section of the survey collects information on the amount of time spent in the area each winter, the areas visited, and the typical costs for these visits. An example of the survey form is included in Appendix B.

Self-census survey kiosks were set up at five USDA-FS Sno-Parks and two other winter recreation sites. The five Sno-Parks were Balsam Meadows, Tamarack, Coyote, Eastwood, and Huntington Lake. The other two winter recreation sites that had kiosks were the Camp Edison cross-country ski trails and the Shaver Lake Point day-use area. The kiosks consisted of a 3-foot by 4-foot board mounted on a post, standing about eight feet above dry ground. A poster was mounted at the top of the board that described the survey and displayed a map of the winter recreation regions. The poster was covered with a sheet of clear plastic that was bolted to the board to prevent vandalism. Two metal boxes were mounted on the board below the poster to hold the survey forms. One box held blank survey forms and pencils. The other box was locked and had a slot cut into the door to drop in completed forms. Figure REC-21-2 shows one of the winter recreation survey self-census kiosks.

The surveys were also distributed to winter recreationists at five business locations. Two locations in Shaver Lake included the Shaver Lake Chamber of Commerce and Shaver Lake Sports. These locations were chosen because Shaver Lake Sports is a seller of recreation equipment and clothing as well as Sno-Park permits and the Chamber of Commerce is frequented by visitors to the area. Two of the other business locations were the Rancheria Garage and the Lakeshore Resort store at Huntington

Lake. The Lakeshore Resort store is located across the road from the Huntington Lake Sno-Park and sells food and other goods. Rancheria Garage offers snowmobile rental and storage services. These four businesses at Shaver Lake and Huntington Lake were given plastic brochure holders to display the survey forms in a prominent location for customers to notice. A set of survey forms was given to the manager of the Mono Hot Springs Resort to distribute to any winter visitors.

The USDA-FS conducted a survey at the Tamarack and Coyote Sno-Parks during the winter of 2001-2002, also. They agreed to offer the SCE winter survey to recreationists at the time of their survey. A set of survey forms was given to the USDA-FS to distribute at these times.

The survey kiosks and the four Shaver-Huntington business locations were visited once a week to replenish the stock of surveys and pencils and to pick up completed surveys. During these visits, the self-census kiosks were checked for signs of vandalism and repair needs. Access to the kiosks was maintained by shoveling snow as needed. These visits were conducted on weekdays, typically Thursdays, to ensure that the kiosks and businesses were all stocked with surveys prior to the weekends. The kiosk attendant kept a log of these visits in which the following information was recorded: codes from survey forms left, codes from completed surveys collected, number of vehicles, number of vehicles with trailers, time, weather, temperature, and relevant notes.

5.0 STUDY RESULTS AND ANALYSIS

The USDA-FS Winter Recreation Guide for the Sierra National Forest, Pine Ridge Ranger District is the primary source of public information identified which describes the winter recreation opportunities in the basin. The guide is a fold-out map of the region with descriptions of the winter recreation opportunities on the reverse side. Provided in the guide is a list of the Sno-Parks, trails, and types of trail use for the region. The map indicates locations of Sno-Parks and trails in the region, as well as safety precautions and use limitations. The Pine Ridge Ranger District encompasses most of the Project region.

There are five designated Sno-Parks in the Project region. Sno-Parks are designated staging areas for recreational users of the area. They are sponsored by the California Department of Parks and Recreation to provide off highway parking in undeveloped, dispersed, recreation areas. Sno-Park users must obtain a parking permit from either the ranger station or a local business for use.

The Sno-Parks are located at Balsam Forebay, north of Shaver Lake (Balsam Meadow), Tamarack Ridge (Tamarack, and Coyote), at the Eastwood Visitor Center (Eastwood), and at the USFS Boat Ramp parking lot near the northwest end of Huntington Lake (Huntington Lake).

There are three main types of winter recreational trails designated by the USDA-FS. These are groomed snowmobile trails, ungroomed snowmobile trails, and ungroomed

nordic ski trails (Table REC-21-1). Snowmobile and ATV users are restricted from using designated nordic ski trails. Nordic skiers are permitted on all of the trails listed. Although they may use any of the trails in the system, nine trails are best suited for nordic skiers (four out of Coyote, four out of Tamarack, and one out of Eastwood Sno-Parks) due to length and grade.

Winter recreation trails extend throughout the Project area. In addition to the nine nordic ski trails described above, there are 22 groomed and ungroomed snowmobile trails available. The Winter Recreation Guide describes the location, length, difficulty, use type, and interesting features of each trail. The Tamarack, Coyote, Eastwood, and Huntington Lake Sno-Parks are the four main trailheads providing user access into the region. The Coyote Nordic Trailhead at Coyote Sno-Park accesses Tamarack Mountain on the west side of Highway 168. The Tamarack Ridge Snowmobile Trailhead at Tamarack Sno-Park accesses Tamarack Ridge east of Highway 168 and areas northeast to Coyote Lake. The Huntington Lake Sno-Park provides access to areas surrounding both Huntington Lake and the Kaiser Wilderness Area. These trails connect with the Tamarack trails to the south and the Kaiser Ridge trails to the east. The Kaiser Pass Trailhead at Eastwood Sno-Park accesses areas over Kaiser Pass up to Lake Edison and Florence Lake.

The Winter Recreation Guide is available for purchase at Sierra National Forest offices and local businesses. A copy of the guides Winter Recreation Areas map is included as the base map for Figure REC-21-1, Winter Recreation Regions Map.

Information regarding past winter recreation use in the area was obtained through consultation with recreation managers and group representatives. This information is described in the telephone interview summary, below.

5.1 TELEPHONE INTERVIEWS

Telephone interviews were conducted with the Pine Ridge Nordic Ski Patrol, Sierra Snowmobile Association (SSA), Sierra National Forest, and SCE. The results of the telephone interviews with agency and user group representatives confirm the results of the winter survey. The Shaver Lake area is managed by SCE for non-motorized winter recreation activities. The primary uses in this area are cross-country skiing, snow shoeing, and snow play. Another popular destination area for cross-country skiers and snow shoers is Tamarack Ridge, which is the focus region for the Pine Ridge Nordic Ski Patrol. Sierra Snowmobile Association members use all of the Basin regions, except Shaver Lake. In addition to snowmobiling, their primary activities include trail maintenance. The SNF manages winter recreation activities in all regions, except Shaver Lake. The average interview response considers the recreation opportunities and support facilities in the area to be above average. No one interviewed rated either the opportunities or facilities any less than average. The reasons that users enjoy the area include the pristine setting, variety of recreation opportunities, and groomed trails. Suggestions for enhancement of the area for winter recreation include improving maintenance/grooming and providing more facilities/staging areas.

Pine Ridge Nordic Ski Patrol

John Putnam was the representative for the Pine Ridge Nordic Ski Patrol in the telephone survey. The ski patrol is a cross country skier volunteer organization that, in coordination with the SNF, offers skier support on Project area trails by providing information, and assistance to the general public. The ski patrol focuses their efforts on winter recreation activities on the Tamarack Ridge and Coyote Trail areas. They utilize the Nordic ski trails and some groomed snowmobile trails throughout this region. Shaver Lake Vista on Coyote Trail and the diverse areas on Tamarack Ridge were identified as the primary destinations for winter recreation. The average recreational visit by group members is about six to eight hours. The average nordic ski trip distance covers seven miles. Average group size for nordic skiers is three people. The ski patrol rates the quality of local recreation activities as average and the quality of support facilities as above average. The ski patrol suggests a groomed cross-country ski trail program may increase the attractiveness of the area to more potential skiers. Mr. Putnam stated that groomed snowmobile trails are not ideal for nordic skiing. The ski patrol would also like to see nordic trail expansion into the Huntington Lake and Shaver Lake regions. This would promote more usage by the general public and expansion of the Pine Ridge Nordic Ski Patrol.

Sierra Snowmobile Association

Association President Doug Bibb was the representative for the Sierra Snowmobile Association (SSA) in the telephone survey. The SSA's primary focus is snowmobiling and trail maintenance in the area. The SSA enjoys the snowmobiling opportunities around Tamarack Ridge, Huntington Lake, Kaiser Ridge, High Sierra Station, Florence Lake, Lake Edison, and Stump Springs Road/Mount Tom areas. The SSA primarily uses groomed snowmobile trails to access their recreation destinations. Eastwood, Tamarack, and Huntington Lake Sno-Parks were recognized as the primary staging destinations for winter recreation. The average amount of time spent by members in the Project region is eight hours. About 50 percent of the snowmobile recreationists have cabins within the Project region, and most members stay overnight during their visit. The average daily trip is about 25 miles, and typically groups of four people travel together on an outing. The SSA rates the quality of local recreation activities and support facilities as above average. The association finds that lack of crowds, the pristine setting, and the 150+ miles of groomed trails make the region attractive to users. On average, members visit for a total of six days per winter season. Most visits occur on the weekends. Some members also fish in the early spring at Portal Forebay or Huntington Lake. Mr. Bibb expressed the SSA's appreciation of SCE's support of winter recreation in the area.

Sierra National Forest

Mike Robinson was the representative for the USDA-FS in the telephone survey. Mr. Robinson manages the USDA-FS winter activities in the forest including Sno-Park maintenance and trail grooming. The USDA-FS promotes winter recreation activities around Tamarack Ridge, Huntington Lake, Kaiser Ridge, High Sierra Station, Florence

Lake, Lake Edison, and Stump Springs Road/Mt. Tom. Tamarack, Coyote, and Huntington Lake Sno-Parks are the most used staging areas. The USDA-FS rates the quality of local recreation activities and support facilities as excellent. The winter recreation management goals for the USDA-FS include understanding the needs of the current recreational users of the area and providing quality recreational service to those users. The agency would like to see additional trailheads, parking areas, restrooms, and trails built within the region. The USDA-FS, in the management of the area, recognizes all special-interest groups that use the area for winter recreation, including the Sierra Club, the SSA, the Pine Ridge Nordic Ski Patrol, and dog sled race trainers.

Annually, the Forest Service collects and compiles data from the High Sierra Ranger District's Winter Recreation Daily logs, submitted by snowmobile volunteer patrols, Nordic ski volunteer patrols, recreation personnel, snow grooming daily logs and Rancheria Enterprises rental agreements. The total winter use was estimated for the Forest Service's annual submission to the State of California for a grant supporting the operation and maintenance of winter facilities in the Huntington Lake area. For the winter of 2001-2002, the season that the Winter Recreation Survey was conducted, snowmobile use is estimated at 5100 visits, the cross-country ski use at 2400 visits, and the snow play use at 14,500 visits (SNF, 2003).

Southern California Edison

Rich Bagley was the representative for SCE in the telephone survey. SCE manages the forest around Shaver Lake for winter recreation activities including cross-country skiing, snow shoeing, and snow play. SCE promotes winter recreation activities around Shaver Lake and within Camp Edison. Tamarack Ridge and Coyote Trailheads were identified as the popular destinations for winter recreation. SCE rates the quality of local recreation activities as above average and the quality of support facilities as average. The winter recreation management goals for SCE include meeting license requirements and enhancing public use in the area.

5.2 WINTER RECREATION SELF-CENSUS SURVEY

A total of 378 winter recreation self-census user surveys were received during the course of the study. The survey data summarized below represents the 378 winter user groups that elected to participate in the survey during the 2001-2002 winter recreation season. Each survey form received represents one user group, which is made up of one or more users. However, when reviewing survey forms the total number of responses to the survey questions is often less than 378, as many forms had questions left unanswered. A summary of the survey question responses is presented in summary tables included in Appendix C.

The survey form was divided into three sections including background, trip survey, and historical winter use survey. The average number of responses for questions in the historical use section of the survey is 351. Out of 378 surveys received, this shows that most of the people using the Basin for winter recreation activities are return visitors.

The historical survey responses, therefore, provide a valuable data set allowing for comparison of the current trip data to typical winter use in the area.

The self-census survey responses provide data on the perceived needs, such as recreation enhancements, of individuals and groups using the winter recreation resources in the Big Creek Basin. Although survey results of existing users may identify the desire for recreation enhancements, such as additional trails, this does not mean that such enhancements are warranted based on the demand on those resources or the relationship of the enhancements to project operations and maintenance.

The responses to the survey questionnaire are summarized below.

Basin Historical Winter Use

The results of the historical survey provides a general description of the location and frequency of winter recreation use as well as the amount of money spent and the types of commodities purchased, and are summarized in Tables REC-21-2 through REC-21-9, and in the following:

- Nearly all of the winter recreationists (94.9 percent) typically use one or all of the regions west of Kaiser Pass (Shaver Lake, Tamarack Ridge, and Huntington Lake) (Table REC-21-2).
- Of all winter recreationists, 28.7 percent used backcountry regions east of Kaiser Pass (Kaiser Ridge, High Sierra Station/Mono Hot Springs, Florence Lake, Edison Lake, and Stump Springs Road/Mount Tom) (Table REC-21-2).
- The majority of winter recreationists made three or more visits to the area during prior winter recreation seasons (75.3 percent) and spent a total of six or more days in the area each season (55.9 percent) (Tables REC-21-3 and REC-21-4).
- Nearly all (93.8 percent) respondents said that their average trip was five days or less, with approximately two thirds (66.7 percent) reporting one or two days as the average length (Table REC-21-5).
- More than half of the respondents (58.0 percent) used the area on weekends only (Table REC-21-6).
- Approximately one-third of the survey respondents said that they spent no more than \$50 locally (32.6 percent) and \$100 total (32.4 percent) for a typical trip (Tables REC-21-7 and REC-21-8).
- Food (91.1 percent) and gas (63.0 percent) were the most common expenditures (Table REC-21-9).

Overall Basin Current Use

The responses to the background and trip survey sections of the winter survey form lead to a description of the current winter recreation use in the Basin. User group size and origin (local vs. non-local) is determined from information collected in the background section. The trip survey section obtains information regarding the activities participated in and the locations used, reasons for choosing to recreate in the area, length of stay, quality ratings, and open-ended responses regarding enjoyment and suggestions. The results of the background and trip survey sections are summarized in Tables REC-21-10 through REC-21-23. Following is a discussion of the significant findings from the questions in these sections.

- The origin of winter recreationists in the Basin is approximately evenly split between locals (live in Fresno County) and non-locals (Table REC-21-10).
- Over half of the user groups said that they found out about recreation opportunities in the area because they live locally and about one-third said that they heard through word of mouth from family or a friend (Table REC-21-11).
- The majority (82.8 percent) of non-local winter recreationists who stayed overnight rented a home, hotel, condo, or lodge rather than using a RV or camping (Table REC-21-12).
- The average group size of Basin user groups was 4.6 people per group. There is a slight difference in user group size between regions east and west of Kaiser Pass. Regions 1, 2, and 3, located west of Kaiser Pass are accessible by car throughout the winter season and the average group size is 5.5 people/group. Groups using Regions 4 through 8 (Kaiser Ridge and beyond) have about 4.6 people/group (Table REC-21-13).
- Throughout the Basin, most user groups (64.3 percent) report that the length of their recreation activity is no more than eight hours (Table REC-21-14).
- The most common winter recreation activities in the Basin are snowmobiling (47.1 percent of user groups) and snow play (32.3 percent of user groups). Many other activities are supported by the region including downhill skiing and snowboarding at Sierra Summit Resort; and trail activities including cross-country skiing and snow shoeing; and snow camping. Many user groups participate in multiple activities during their visits. The percentage of user groups participating in each activity is presented in Table REC-21-15.
- The primary reasons for choosing to recreate in the area include: vistas/pristine setting, groomed trails, uncrowded atmosphere, and closeness to home (Table REC-21-16).

Questions 10 and 11 of the survey solicited open-ended responses regarding enjoyable factors and suggested changes for the recreation area. The responses to questions 10

and 11 were entered into a list and categorized based on similarity in the nature of the comment. Trends in the recreationists, preferences and needs are shown by the percentage of responses to each category (Tables REC-21-17 and REC-21-18). Overall, winter recreationists in the Basin particularly enjoy the natural setting, the activity they came to participate in, and the uncrowded/relaxing atmosphere.

- Approximately one-quarter (26.8 percent) of the user groups suggested better maintenance (including grooming, signage, and trail markers) and more recreation facilities (25.1 percent) as changes that would enhance their experience.
- Approximately one-fifth (20.2 percent) of the user groups said that there was no need for change.

Regional Basin Current Use

The Big Creek Basin was divided into eight winter recreation regions for the purposes of this survey (Figure REC-21-1) as follows:

- Shaver Lake/Camp Edison
- Tamarack Ridge/Coyote Trail
- Huntington Lake
- Kaiser Ridge
- High Sierra Station/Mono Hot Springs
- Florence Lake
- Edison Lake
- Stump Springs Road/Mount Tom

The regions were focused around areas of designated recreation facilities and/or destinations. Use is highest in regions 1, 2, and 3 (those that are most accessible) and lower in regions 4 through 8. Region 4 use is still relatively high, probably because of its proximity to accessible staging areas in region 3. Over 50 percent of all user groups responding to the survey used multiple regions during their visit. In regions 4 through 8, the number of user groups using multiple areas is more than 75 percent. The detailed regional use distribution data is presented in Table REC-21-19. In this discussion of regional Basin use, a division between regions 3 and 4 is assumed, grouping regions 4 through 8 (backcountry regions), because of similarities in use and accessibility.

As discussed above, the two primary winter recreation activities in the Basin are snowmobiling and snow play. In regions 1, 2, and 3, this fact holds true. Region 2 also has a relatively high percentage of cross-country skiers. In region 3, snowmobiling is

emerging as the dominant activity. In the backcountry regions, snowmobiling is by far the dominant activity with 89-94 percent of all users in those regions participating in that activity (Table REC-21-20). The reasons that user groups chose their recreation regions correspond with the regions' primary activity. In the snowmobile intense regions (regions 3 to 8), the primary reason user groups chose the area was groomed trails. The secondary reasons for choosing these regions were challenging trails/variety of trails and vistas/pristine setting. In regions 1 and 2, the primary reasons for choosing the area were uncrowded, vistas/pristine setting, and close to home (Table REC-21-21).

Winter recreation user groups rated the quality of recreation opportunities and support facilities in the Basin and results show that user groups are very satisfied with the recreation opportunities available. In all eight regions, over 50 percent of the user groups rated the opportunities above average or excellent (Table REC-21-22). Most user groups also rated support facilities in regions 2, 3, 4, and 5 above average or excellent (Table REC-21-23). Regions 1, 6, 7, and 8 support facilities were rated average to above average by the majority of user groups. No region had more than 22 percent of user groups rating support facilities below average.

TABLES

Table REC-21-1. Winter Recreation Opportunities in the Big Creek Basin

Trail # ¹	Trail Name	Staging Area	Distance (mi.)	Type ²	Difficulty
1	Eagle Trail	Coyote Sno-Park	5.0	UNST	Easiest
2	Marmot Loop	Coyote Sno-Park	2.2	UNST	More Difficult
3	Coyote Loop	Coyote Sno-Park	6.0	UNST	Most Difficult
4	Grizzly Loop	Coyote Sno-Park	5.7	UNST	More Difficult
5	Chipmunk Trail	Tamarack Sno-Park	3.0	UNST, GST	Easiest
6	Porcupine Loop	Tamarack Sno-Park	4.0	UNST	More Difficult
7	Raccoon Loop	Tamarack Sno-Park	4.0	UNST	More Difficult
8	Raven Loop	Tamarack Sno-Park	4.4	UNST	Most Difficult
9	Rancheria Loop	Eastwood Sno-Park	1.5	UNST	Easiest
10	Huntington Lake Trail	Huntington Lake Sno-Park	10.0	GST	Easiest
11	Willow Hill Trail	Huntington Lake Sno-Park	3.0	GST	Easiest
12	Mushroom Rock Trail	Huntington Lake Sno-Park	7.0	GST	Easiest
13	Grouse Creek Trail	Huntington Lake Sno-Park	18.0	GST	More Difficult
14	Kaiser Pass Trail	Eastwood Sno-Park	16.0	GST	More Difficult
15	Rancheria Trail	Huntington Lake Sno-Park	8.0	GST	More Difficult
16	China Peak Trail	Huntington Lake Sno-Park	3.0	GST	More Difficult
17	Edison Lake Trail	Eastwood Sno-Park	7.0	GST	More Difficult
18	Florence Lake Trail	Eastwood Sno-Park	7.0	GST	More Difficult
19	White Bark Trail	Eastwood Sno-Park	2.0	UST	More Difficult
20	Deer Creek trail	Eastwood Sno-Park	5.0	UST	Most Difficult
21	Stump Springs Trail	Huntington Lake Sno-Park	30.0	GST	More Difficult
22	Mount Tom Trail	Huntington Lake Sno-Park	5.0	UST	Most Difficult
23	Coyote Lake Trail	Tamarack Ridge Sno-Park	12.0	UST, GST	Most Difficult
24	Red Mountain Trail	Tamarack Ridge Sno-Park	5.0	GST	Most Difficult
25	Strawberry Lake Trail	Tamarack Ridge Sno-Park	3.0	UST	Most Difficult
26	Tamarack Trail	Tamarack Ridge Sno-Park	10.0	GST	More Difficult
27	Sunset Trail	Tamarack Ridge Sno-Park	1.0	GST	Easiest
28	Meadow Trail	Tamarack Ridge Sno-Park	2.0	GST	Easiest
29	Red Fir Trail	Tamarack Ridge Sno-Park	4.0	GST	Easiest
30	Snowslide Trail	Tamarack Ridge Sno-Park	4.0	GST	More Difficult
31	Bald Mountain Trail	Tamarack Ridge Sno-Park	18.0	UST, GST	More Difficult

¹ Number based from USFS Winter Recreation Guide for the Pine Ridge Ranger District.

² UNST – Ungroomed Nordic Ski Trail

GST – Groomed Snowmobile Trail

UST – Ungroomed Snowmobile Trail

Source: Sierra National Forest, Pine Ridge Ranger District Winter Recreation Guide, USDA-FS 1992

Table REC-21-2. Historic Winter Recreation Regional Use

Region	Individual Region Responses	Combined Region Responses ¹	Individual Region Percentage ²	Combined Region Percentage
Region 1 - Shaver Lake/Camp Edison	123		34.6%	
Region 2 - Tamarack Ridge/Coyote Trail	164	337 ³	46.2%	94.9% ³
Region 3 - Huntington Lake	198		55.8%	
Region 4 - Kaiser Ridge	86		24.2%	
Region 5 - High Sierra Station/Mono Hot Springs	41		11.5%	
Region 6 - Florence Lake	36	102 ⁴	10.1%	28.7% ⁴
Region 7 - Edison Lake	41		11.5%	
Region 8 - Stump Springs Road/Mount Tom	24		6.8%	

¹Total number of survey forms with one or more regions of the combined group checked.

²Percentage based on number of surveys with responses to Question 16 (355).

³Combined Regions 1, 2, and 3

⁴Combined Regions 4 through 8

Table REC-21-3. Average Number of Winter Recreation Visits Per Season (Nov.-April)

Number of Visits	Total Responses	Percentage ¹	Combined Response %
1	45	12.7%	
2	42	11.9%	
3 to 5	88	24.9%	
6 to 10	65	18.4%	75.3% ²
10+	113	32.0%	

¹Percentage based on total number of surveys with responses to Question 12 (353).

²Percentage of user groups averaging 3 or more visits per season.

Table REC-21-4. Historic Frequency of Recreation Visits

Days per Season	Total Responses	Percentage ¹	Combined Response %
1 to 3	86	24.6%	
4 to 6	68	19.4%	
6 to 10	50	14.3%	
11 to 15	33	9.4%	55.9% ²
15+	113	32.2%	

¹Percentage based on total number of surveys with responses to Question 14 (350).

²Percentage of user groups averaging 6 or more visit days per season.

Table REC-21-5. Historic Average Winter Recreation Visit Length

Number of Days	Total Responses	Percentage ¹	1 to 2-Day Visits (%)	5-Day or Less Visits (%)
1	129	36.8%	66.7% ²	93.8% ³
2	105	29.9%		
3 to 5	95	27.1%		
6 to 10	4	1.1%		
10+	18	5.1%		

¹Percentage based on total number of surveys with responses to Question 13 (351).

²Percentage of visits lasting 1 to 2 days.

³Percentage of visits lasting 5 days or less.

Table REC-21-6. Historic Winter Recreation Use – Preferred Days

Days	Total Responses	Percentage ¹
Weekend days (Sat, Sun)	210	58.0%
Weekdays (Mon-Fri)	80	22.1%
Both	72	19.9%

¹Percentage based on total number of surveys with responses to Question 15 (362).

Table REC-21-7. Local Spending

Money Spent	Total Responses	Percentage ¹
\$0 to \$50	117	32.6%
\$51 to \$100	66	18.4%
\$101 to \$200	80	22.3%
\$201 to \$500	58	16.2%
more than \$500	38	10.6%

¹Percentage based on total number of surveys with responses to Question 17 (359).

Table REC-21-8. Overall Trip Spending

Money Spent	Total Responses	Percentage ¹
\$0 to \$100	113	32.4%
\$101 to \$200	67	19.2%
\$201 to \$500	94	26.9%
\$501 to \$1,000	53	15.2%
more than \$1,000	22	6.3%

¹Percentage based on total number of surveys with responses to Question 18 (349).

Table REC-21-9. Local Expenditures

Expenditures	Total Responses¹	Percentage²
Food	318	91.1%
Gasoline	220	63.0%
Equipment rentals	128	36.7%
Lodging	99	28.4%
Other	42	12.0%

¹ Some respondents indicated multiple expenditures.

² Percentage based on total number of surveys with responses to Question 19 (349).

Table REC-21-10. Winter Recreation User Group Origin

Residence	Total Responses	Percentage¹
Local (Fresno County)	177	46.8%
Non-Local	154	40.7%
Local and Non-Local in Group	26	6.9%
No Response	21	5.6%

¹ Percentage of total surveys received (378).

Table REC-21-11. Winter Recreation Opportunity Information Dissemination

Information Source	Total Responses	Percentage¹
Live Locally	194	51.3%
From Family or a Friend	127	33.6%
Internet/Website	14	3.7%
Newspaper or Magazine	8	2.1%
Other	42	11.1%

¹ Percentage of total surveys received (378). Total percentage of 101.8 is a result of multiple responses from some surveys.

Table REC-21-12. Non-Local User Groups Overnight Accommodations

Accommodations	Total Responses	Percentage¹
Local home/hotel/ condo/cabin or lodge	106	82.8%
Recreational vehicle/trailer/camper	15	11.7%
Snow camping trailside	5	3.9%
Snow camping in a developed campground	2	1.6%

¹ Percentage based on total number of non-local user groups responding to Question 6 (128).

Table REC-21-13. Group Size by Region

Region	Total User Groups	Total People in Groups	Mean Group Size (standard deviation)	Combined Region Mean Group Size
Region 1 - Shaver Lake/Camp Edison	112	609	5.5 (4.1)	
Region 2 - Tamarack Ridge/Coyote Trail	172	996	6.0 (17.1)	5.6 ¹
Region 3 - Huntington Lake	182	981	5.4 (5.4)	
Region 4 - Kaiser Ridge	97	438	4.6 (3.0)	
Region 5 - High Sierra Station/Mono Hot Springs	47	217	4.7 (3.2)	
Region 6 - Florence Lake	32	124	3.9 (1.6)	4.2 ²
Region 7 - Edison Lake	33	124	3.8 (1.8)	
Region 8 - Stump Springs Road/Mount Tom	18	67	3.9 (2.5)	
Basin Average 4.7				

¹ Combined Regions 1, 2, and 3² Combined Regions 4 through 8**Table REC-21-14. Length of Recreation Activity**

Length of Time	Total Responses	Percentage ¹
1-4 hours	96	25.4%
4-8 hours	147	38.9%
8-24 hours	32	8.5%
2 days	37	9.8%
2+ days	71	18.8%

¹ Percentage of total surveys received (378). Total percentage of 101.4 is a result of multiple responses from some surveys.**Table REC-21-15. Distribution of User Groups by Activity Type**

Activity	Total User Groups ¹	Percentage of user groups in each activity ²
Snow mobiling	178	47.1%
Snow play (sledding, tubing, etc.)	122	32.3%
Cross-country skiing	61	16.1%
Downhill skiing	48	12.7%
Snowboarding	40	10.6%
Snow shoeing	31	8.2%
Snow camping	17	4.5%
Dog sledding	10	2.6%
Other	49	13.0%

¹ Many respondents indicated multiple activities.² Percentage of total number of user groups surveyed (378). Total percentage of 147.1 is a result of surveys indicating multiple activities.

Table REC-21-16. Reasons for Choosing Trip Destination (Basin-Wide Response Totals)

Reason	Total Responses	Percentage¹
Vistas/pristine setting	147	38.9%
Groomed trails	140	37.0%
Uncrowded	140	37.0%
Close to home	135	35.7%
Variety of trails	100	26.5%
Challenging trails	62	16.4%
Accommodations/local services	56	14.8%
Ice covered reservoirs	9	2.4%
Other	32	8.5%

¹Percentage of total surveys received (378). Total percentage of 217.2 is a result of surveys indicating multiple reasons.

Table REC-21-17. Winter Recreation Visit Enjoyable Factors

Factor	Total Responses	Percentage¹
Landscape/Nature	136	52.9%
Recreation Activity	53	20.6%
Uncrowded/Relaxing	51	19.8%
Facilities	41	16.0%
People With/Encountered	21	8.2%
Location/Accessibility	11	4.3%
Other	22	8.6%

¹Percentage based on the number of surveys with responses to Question 10 (257). Total percentage of 130.4 is a result of surveys indicating multiple factors.

Table REC-21-18. Winter Recreation Visit Enhancement Suggestions

Suggestion	Total Responses	Percentage¹
Maintenance (Grooming, Signage, Trail markers, etc.)	49	26.8%
Region 1 – Shaver Lake/Camp Edison (9)		
Region 2 – Tamarack Ridge/Coyote Trail (13)		
Region 3 – Huntington Lake (4)		
Region 4 – Kaiser Ridge (3)		
Region 7 – Lake Edison (1)		
Multiple Regions (19)		
More Recreation Facilities	46	25.1%
Region 1 – Shaver Lake/Camp Edison (3)		
Region 2 – Tamarack Ridge/Coyote Trail (7)		
Region 3 – Huntington Lake (5)		
Region 4 – Kaiser Ridge (6)		
Region 7 – Lake Edison (1)		
Multiple Regions (24)		
No need for change	37	20.2%
Region 1 – Shaver Lake/Camp Edison (8)		
Region 2 – Tamarack Ridge/Coyote Trail (2)		
Region 3 – Huntington Lake (8)		
Region 4 – Kaiser Ridge (4)		
Multiple Regions (15)		
Regulate uses/areas to prevent conflicts	30	16.4%
Region 1 – Shaver Lake/Camp Edison (3)		
Region 2 – Tamarack Ridge/Coyote Trail (10)		
Region 3 – Huntington Lake (6)		
Region 4 – Kaiser Ridge (3)		
Multiple Regions (8)		
Improve Restrooms	24	13.1%
Region 1 – Shaver Lake/Camp Edison (7)		
Region 2 – Tamarack Ridge/Coyote Trail (10)		
Region 3 – Huntington Lake (3)		
Region 4 – Kaiser Ridge (1)		
Multiple Regions (3)		
Other	22	12.0%

¹ Percentage based on the number of surveys with responses to Question 11 (183). Total percentage of 113.6 is a result of surveys with multiple suggestions.

Table REC-21-19. Winter Recreation Regions – Exclusive and Multiple Use

Region	Total User Groups	Exclusive Region User		Multiple Region User	
		Groups	Percentage	Groups	Percentage
Region 1 - Shaver Lake/Camp Edison	112	47	42%	65	58%
Region 2 - Tamarack Ridge/Coyote Trail	172	84	49%	88	51%
Region 3 - Huntington Lake	182	62	34%	120	66%
Region 4 - Kaiser Ridge	97	22	23%	75	77%
Region 5 - High Sierra Station/Mono Hot Springs	47	6	13%	41	87%
Region 6 - Florence Lake	32	0	0%	32	100%
Region 7 - Edison Lake	33	2	6%	31	94%
Region 8 - Stump Springs Road/Mount Tom	18	1	6%	17	94%

Table REC-21-20. Activities Participated in by Region

Activity	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		Region 8	
	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²
Snowmobiling	32	29%	67	39%	113	62%	86	89%	44	94%	30	94%	31	94%	16	89%
Cross-country skiing	11	10%	46	27%	17	9%	11	11%	3	6%	2	6%	3	9%	3	17%
Snow shoeing	13	12%	15	9%	18	10%	5	5%	6	13%	4	13%	5	15%	3	17%
Downhill skiing	18	16%	18	10%	34	19%	17	18%	9	19%	6	19%	7	21%	7	39%
Snowboarding	14	13%	17	10%	29	16%	16	16%	9	19%	9	28%	8	24%	4	22%
Dog sledding	4	4%	7	4%	4	2%	3	3%	2	4%	2	6%	2	6%	2	11%
Snow play	57	51%	67	39%	53	29%	19	20%	12	26%	8	25%	10	30%	5	28%
Snow camping	8	7%	12	7%	12	7%	5	5%	4	9%	3	9%	4	12%	3	17%
Other	32	29%	18	10%	25	14%	5	5%	3	6%	2	6%	3	9%	3	17%
Total User Groups Per Region	112		172		182		97		47		32		33		18	

¹# = Number of user groups participating in each activity, by region.

²% = Percentage of total user groups per region participating in each activity.

Table REC-21-21. Reasons for Choosing Trip Destination (by Region)

Reason	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		Region 8	
	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²
Groomed trails	27	24%	61	35%	83	46%	52	54%	27	57%	18	56%	20	61%	10	56%
Challenging trails	16	14%	38	22%	42	23%	27	28%	10	21%	13	41%	12	36%	10	56%
Vistas/pristine setting	47	42%	66	38%	66	36%	41	42%	27	57%	14	44%	18	55%	9	50%
Variety of trails	30	27%	54	31%	61	34%	29	30%	16	34%	16	50%	12	36%	9	50%

**Table REC-21-21. Reasons for Choosing Trip Destination (by Region)
(continued)**

Reason	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		Region 8	
	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²	# ¹	% ²
Uncrowded	51	46%	74	43%	63	35%	23	24%	11	23%	8	25%	8	24%	8	44%
Close to home	41	37%	68	40%	55	30%	37	38%	20	43%	11	34%	13	39%	7	39%
Accommodations/ local services	18	16%	19	11%	38	21%	11	11%	8	17%	4	13%	4	12%	4	22%
Ice covered reservoirs	5	4%	3	2%	5	3%	1	1%	1	2%	1	3%	1	3%	1	6%
Other	8	7%	13	8%	14	8%	5	5%	1	2%	1	3%	1	3%	1	6%
Total User Groups Per Region	112		172		182		97		47		32		33		18	

¹# = Number of user groups responding to each reason, by region.²% = Percentage of total user groups per region responding to each reason.**Table REC-21-22. Winter Recreation Opportunity Ratings**

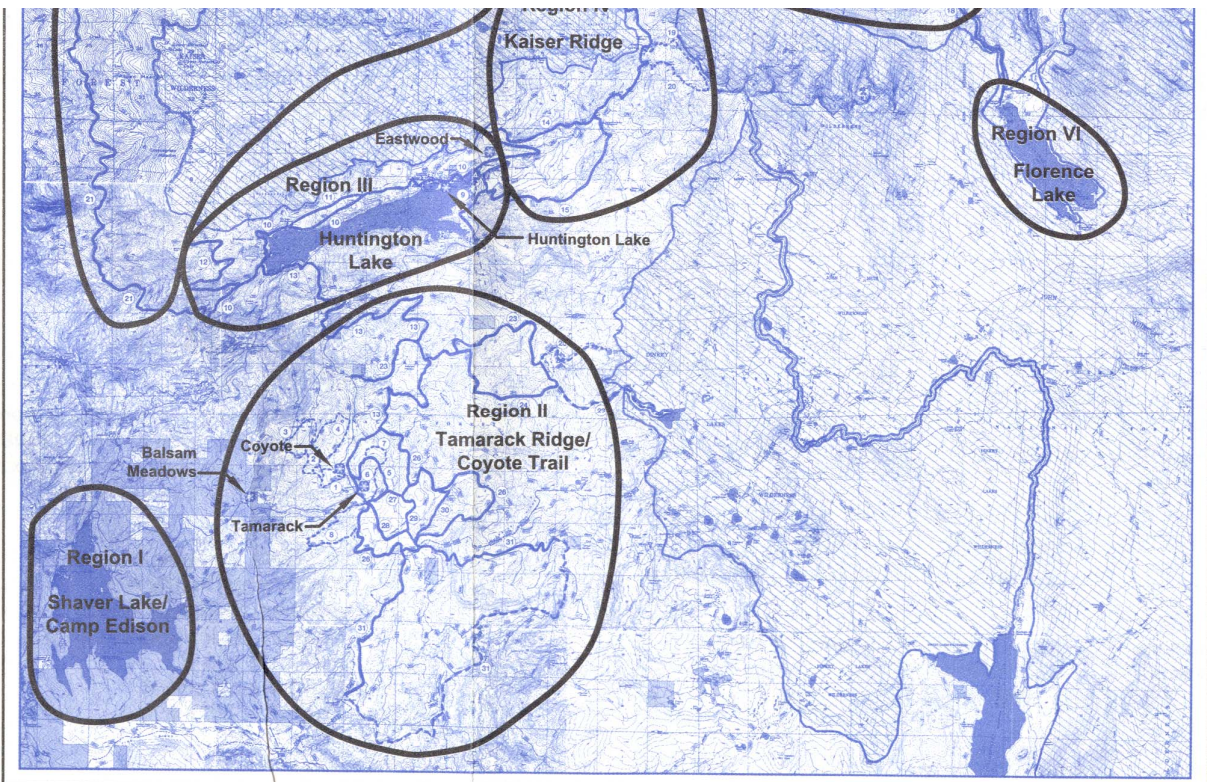
Quality Rating	Recreation Location															
	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		Region 8	
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹
(1) Poor	2	2%	0	0%	2	1%	1	1%	1	2%	1	3%	1	3%	0	0%
(2) Below Average	2	2%	1	1%	8	4%	6	6%	3	6%	1	3%	1	3%	1	6%
(3) Average	44	39%	48	28%	44	24%	20	21%	13	28%	11	34%	12	36%	8	44%
(4) Above Average	34	30%	62	36%	68	37%	42	43%	13	28%	13	41%	13	39%	5	28%
(5) Excellent	32	29%	61	35%	62	34%	31	32%	19	40%	8	25%	8	24%	5	28%

¹% = Percentage based on total number of survey responses per region. Total percentage by region may exceed 100% resulting from multiple rating responses.**Table REC-21-23. Winter Recreation Support Facility Ratings**

Quality Rating	Recreation Location															
	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		Region 8	
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹
(1) Poor	3	3%	6	3%	6	3%	2	2%	0	0%	0	0%	0	0%	0	0%
(2) Below Average	7	6%	22	13%	19	10%	11	11%	6	13%	7	22%	7	21%	4	22%
(3) Average	58	52%	65	38%	59	32%	32	33%	17	36%	15	47%	13	39%	7	39%
(4) Above Average	27	24%	56	33%	61	34%	36	37%	19	40%	10	31%	13	39%	5	28%
(5) Excellent	23	21%	34	20%	45	25%	21	22%	8	17%	4	13%	3	9%	2	11%

¹% = Percentage based on total number of survey responses per region. Total percentage by region may exceed 100% resulting from multiple rating responses.

FIGURES



Note: Base map was reproduced from the USFS, Pineridge Ranger District, Winter Recreation Guide, Sierra National Forest, 1992

Figure REC-21-1. Winter Recreation Regions Map



Figure REC-21-2. Winter Recreation Survey Self-Census Kiosk