

REGIONAL AND ECONOMIC SCIENCES

Applied Policy Studies for the Public and Private Sectors

REPORT ON THE MAIL-IN SURVEY OF CABIN OWNERS IN THE EL DORADO NATIONAL FOREST

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A Cabin Owners' Survey

Introduction

Focus of Study

During the summer of 1999, the Survey Research Center at California State University, Chico contracted with Resource Insights of Sacramento, California, to conduct a survey using a mail-out questionnaire of cabin owners in the El Dorado National Forest. The focus of the study was the use of recreation facilities at sites affected by Project 184 that included four lakes together with four associated stream corridors.

Questionnaire Development

Thomas Wegge of Resource Insights developed the mailout questionnaire for the Cabin Owners' Survey with input from the El Dorado Irrigation District, the U.S.D.A. Forest Service, and several interest groups. Personnel from the Survey Research Center pre-tested the questionnaire and suggested modifications to question wording and the ordering of individual questions. The questionnaire was finalized in November 1999 prior to the beginning of data collection.

The following is a report of findings from the survey of cabin owners in the El Dorado National Forest that was conducted during the fall of 1999 and spring of 2000.

The questionnaire is located in Appendix A of this report. The survey contained 113 questions about use of the cabins, use of the natural facilities in the area and background characteristics of the respondents to the survey.

Sample Design and Sampling Protocols

Survey respondents for the Cabin Owners' Survey were randomly selected from a list of cabin owners provided by the U.S.D.A. Forest Service. The sample size of 512 was selected to yield 250 to 300 returned questionnaires.

Findings

Data Collection

The Cabin Owners' Survey included 512 initial mailings with 506 deliverable. Of these, 295 surveys were completed and returned. This yields a response rate of 58.3% after two (2) follow-up mailings.

Demographic Profile

Household Composition

Cabin owners in the survey were asked a series of questions about themselves and some questions about their families. Household size ranged from 1 to 18 with a mean (average) household size was 2.5. **Table 1** shows the number of household members for the 287 survey respondents.

Disabilities

When the recreation visitors were asked if they had a disability, slightly more than 89% of the 295 respondents indicated they did not have a disability. See **Table 2**.

Age

The ages of the respondents range from 28 to 93 with a mean age of 61. **Table 3/Figure 2** shows the age distribution of the 282 respondents to this question.

Ethnicity

Table 4 shows that 96.0% are white and that there are very low frequencies of other race or ethnic groups.

Education

Almost 70% of the respondents indicated they had a college degree or more of formal education. **Table 5** shows that pattern in the data.

Household Income

The median annual household income of the 237 respondents who answered this question is in the bracket \$50,000 to \$60,000. This compares to about \$40,000 per household for typical Californians. See **Table 6** for the distribution.

Table 1. Household size reported by cabin owners to the Project 184 areas in the El Dorado National Forest - summer of 1999.

Number of Household Members	Number	Percent	Cumulative
			Percent
1	36	12.5%	12.5%
2	161	56.1%	68.6%
3	45	15.7%	84.3%
4	28	9.8%	94.1%
5	6	2.1%	96.2%
6	7	2.4%	98.6%
7 or more	4	1.4%	100.0%
Total	287	100.0%	

Table 2. Number of cabin owners in the Project 184 areas of the El Dorado National Forest who reported having a disability - summer of 1999.

Are Cabin Owners Disabled?	Number	Percent
Yes	30	10.6
No	253	89.4
Total	283	100.0

Table 3. Age of Cabin Owners in the Project 184 areas of the El Dorado National Forest - summer of 1999.

Age of Cabin Owners	Number	Percent	Cumulative Percent
28	3	.4	.4
29	1	.4	.7
31	1	.4	1.4
33	4	.4	1.8
34	1	.7	2.5
36	3	1.1	3.6
37	5	.4	3.9
38	4	.7	4.6
39	3	1.1	5.7
40	2	1.1	6.7
41	3	1.1	7.8
42	2	.7	8.5
43	9	.7	9.2
44	9	2.8	12.1
45	6	1.8	13.8
46	8	1.1	14.9
47	9	1.4	16.3
48	15	2.5	18.8
49	13	1.4	20.2
50	20	2.5	22.7
51	13	2.5	25.2
52	23	3.9	29.1
53	18	3.6	32.6
54	26	2.1	34.8
55	19	3.2	37.9
56	23	.7	38.7
57	32	2.1	40.8
58	31	2.5	43.3
59	34	3.9	47.2
60	32	3.2	50.4
61	32	2.8	53.2
62	24	2.5	55.7
63	30	2.1	57.8
64	49	1.8	59.6
65	50	1.1	60.6
66	55	2.5	63.1
67	62	2.8	66.0
68	51	1.1	67.0
69	59	1.8	68.8

Table 3. (cont'd.)

Age of Cabin Owners	Number	Percent	Cumulative Percent
70	67	3.2	72.0
71	64	3.2	75.2
72	70	2.5	77.7
73	64	1.1	78.7
74	74	1.8	80.5
75	74	2.8	83.3
76	52	1.4	84.8
77	61	1.8	86.5
78	70	1.8	88.3
79	55	2.8	91.1
80	70	1.1	92.2
81	75	1.8	94.0
82	57	1.4	95.4
83	70	.4	95.8
84	55	1.4	97.2
85	43	1.4	98.6
86	50	.7	99.3
87	34	.4	99.7
93	34	.4	100.0
Total	282	100.0	

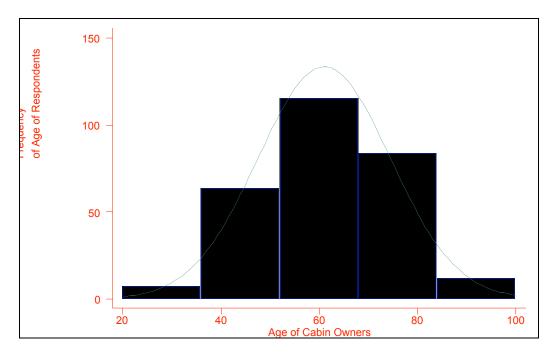


Figure 2

Table 4. Ethnicity of cabin owners in the Project 184 areas of the El Dorado National Forest - summer of 1999.

Ethnicity of Recreation Visitors	Number	Percent
Native American/Alaskan native	5	1.8
Asian/Pacific Islander	1	0.4
Hispanic	1	0.4
White	266	96.0
Other	4	1.4
Total	277	100.0

Table 5. Education of cabin owners in the Project 184 areas of the El Dorado National Forest - summer of 1999.

Education Levels of Recreation Visitors	Number	Percent
High School Not Completed	3	1.1
High School Graduate	19	6.6
Some College	65	22.7
College Graduate	83	29.1
Graduate School or Professional Degree	116	40.6
Total	286	100.1*

^{*} Error due to rounding

Table 6. Household incomes of cabin owners in the Project 184 areas of the El Dorado National Forest - summer of 1999.

Household Income of Recreation Visitors	Number	Percent
Under \$10,000	1	0.4
\$10,000-19,999	5	2.1
\$20,000-29,999	11	4.6
\$30,000-39,999	32	13.5
\$40,000-49,999	20	8.4
\$50,000-59,999	22	9.3
\$60,000-79,999	59	24. 9
\$80,000-99,999	26	11.0
\$100,000-200,000	47	19.8
More than \$200,000	14	5.9
Total	237	100.0

Cabin Profile

Ownership Status

Table 7 shows that 99.7% of the respondents are either cabin owners/co-owners or family members of cabin owners/co-owners.

Years of Personal Use

Respondents had on the average (mean) used their cabins for 33.3 years of personal use. The range was from 1 to 92 years. **Table 8** shows the distribution.

Hours of Travel Time

On the average (mean) respondents traveled 2.8 hours to get to their cabins. The range was from 1 hour to 72 hours. **Table 9** shows the distribution.

Occupied June-September

On the average (mean) respondents said that their cabins were occupied 50.0% of the time during the period June through September. The range was from 0% to 100%.

Used by Respondent

On the average (mean) respondents said that they used their cabins 33.3% of the time during the period June through September. The range was from 0% to 100%.

Occupied October

Respondents indicated that their cabins were occupied an average (mean) of 6.0 days in October. The range was from 0 to 31 days.

Table 7. Ownership status.

Owner Category	Frequency	Percent	Cumulative Percent
Owner/Co-owner	273	92.54	92.54
Family member of Owner/Co-owner	20	6.78	99.32
Friend of Owner/Co-owner	1	0.34	99.66
Other	1	0.34	100.00
Total	395	100.00	

Table 8. Years of personal use for cabin owners in the Project 184 areas of the El Dorado National Forest – summer of 1999.

Years of Personal Use	Frequency	Percent	Cumulative Percent
1	2	0.7	0.7
2	3	1.0	1.7
3	3	1.0	2.7
3.5	2	0.7	3.4
4	5	1.7	5.1
5	11	3.7	8.8
6	6	2.0	10.8
7	7	2.4	13.2
8	6	2.0	15.2
9	2	0.7	15.9
10	3	1.0	16.9
11	4	1.4	18.3
12	4	1.4	19.7
13	3 7	1.0	20.7
14	7	2.4	23.1
15	6	2.0	25.1
16	3	1.0	26.1
17	2	0.7	26.8
18	5	1.7	28.5
19	3	1.0	29.5
20	5	1.7	31.2
21	3	1.0	32.2
22	5	1.7	33.9
23	3	1.0	34.9
24	1	0.3	35.2
25	8	2.7	37.9
26	3	1.0	38.9
27	6	2.0	40.9
28	5	1.7	42.6
29	4	1.4	44.0
30	9	3.1	47.1
31	4	1.4	48.5
32	2	0.7	49.2
33	4	1.4	50.6
34	6	2.0	52.6
35	9	3.1	55.7
36	5	1.7	57.4
37	2 2	0.7	58.1
38	2	0.7	58.8

Table 8. (cont'd.)

Years of Personal Use	Number	Percent	Cumulative Percent
39	3	1.0	59.8
40	13	4.4	64.2
41	3	1.0	65.2
42	4	1.4	66.6
43	1	0.4	67.0
44	3	1.0	68.0
44.5	1	0.4	68.4
45	5	1.7	70.1
47	3	1.0	71.1
48	2	0.7	71.8
49	4	1.4	73.2
50	18	6.1	79.3
51	3	1.0	80.3
52	8	2.7	83.0
53	4	1.4	84.4
54	4	1.4	85.8
55	4	1.4	87.2
56	3	1.0	88.2
57	2	0.7	88.9
58	1	0.4	89.3
59	1	0.4	89.7
60	6	2.0	91.7
61	3	1.0	92.7
62	1	0.4	93.1
65	2	0.7	93.8
66	3	1.0	94.8
67	1	0.4	95.2
69	3	1.0	96.2
70	5	1.7	97.9
72	4	1.4	99.3
73	1	0.3	99.6
74	1	0.3	99.9
80	1	0.3	100.2
92	1	0.3	100.5
Total	295	100.5*	

^{*} Exceeds 100.0% due to rounding error.

Table 9. Hours of travel time for cabin owners in the Project 184 areas of the El Dorado National Forest – summer of 1999.

Hours of Travel Time	Number	Percent
1	122	42.5
2	51	17.8
3	57	19.9
4	38	13.2
5	3	1.1
6	1	.4
7	3	1.1
8	2	.7
9	2	.7
10	3	1.1
11	2	.7
13	1	.4
45	1	.4
72	1	.4
Total	287	100.0

Activities

Listed Activities

The most popular activity is "just relaxing" with 95.3% of the respondents indicating that this is one in which they participate. We gave respondents a list of activities and we ask them to indicate those in which they engaged. On the average, each respondent checked off 6.9 of the activities listed in **Table 10**. The second most popular activity was hiking with 85.1% of respondents listing this as an activity. The third most frequently listed was wildlife observation with 68.8% listing this as an activity. Slightly more than half listed fishing and swimming with 53.9% and 51.9%, respectively. All other listed activities were checked off by less than half of the respondents.

Categories of Activities

We categorized the activities in Table 10 into three broad types: aquatics, land-based and visual. The results are shown in Table 11. Aquatic activities include fishing, swimming, motor boating, kayaking/canoeing, other boating, sailing, tubing, and waterskiing. Land based activities included hiking, picnicking, sunbathing, running/jogging, bicycling, driving OHV's, camping (primitive), horseback riding, winter play, and camping (developed). The visual category includes wildlife observation, other nature study, landscape photography, and just relaxing. The summary in **Table 11** shows that land based and aquatics activities are mentioned on the average of 2.8 times each. Visual activities were mentioned an average of 2.4 times respondent.

Activities and Age

We correlated these three categories of activities, aquatic, land based and visual, with age and found that the pattern conforms to our expectations. **Table 12** shows that as age increases, there is a decreasing likelihood of engaging in those activities that require strenuous output; there are negative correlations between age and use of the water and land. However, there is no relationship with age and the visual activities. This suggests that as age increases cabin owners engage in fewer water and land activities.

Factor Analysis

We applied factor analysis to the data and it revealed there is not much that can be done with the activities. They appear to be poorly correlated across all the items in the scale. The explained variance is not more than 53% at six factors. This suggests that data does not provide coherence in the use of these activities.

Other, Not Listed

Respondents could add activities that were on the questionnaire list as shown in Table 10. The most frequently mentioned was "cabin maintenance" with 35% of respondents mentioning this as an "other activity" as shown in **Table 13**. There were also mentions of reading, visiting family/friends, hunting and walking. Most of the other items mentioned approached a frequency of one.

Primary Activity

The most popular primary activity is "just relaxing" with 41.3% percent of cabin owners indicating this as shown in **Table 14**. Hiking is second with 27.9%. No other activities scored in the double digits as primary activities.

Secondary Activity

Hiking, just relaxing, and fishing were the most popular secondary activities with scores of 23.3%, 21.5%, and 17.1% respectively. As shown in **Table 15**, no other activities were listed by 10% or more of the respondents as secondary activities.

Other Persons Activities

We also asked respondents about the activities of other persons who stayed at their cabins. The most popular were hiking (90.2%) and just relaxing (88.5%). As **Table 16** shows, fishing came in third with 74.6% indicating that this is an activity of other people staying in their cabins. Swimming, wildlife observation, and sunbathing were also very popular with 68.1%, 63.1%, and 59.3%, respectively. No other activities were listed by 50% or more of the respondents.

On the average, respondents listed eight activities each for other people staying in the cabins. Although these activities are not in the same rank order, they are identical to the five highest ranked activities among the primary respondents. There is a high level of consistency in the two sets of responses.

Table 10. Activities of cabin owners in the Project 184 areas of the El Dorado National Forest - summer of 1999.

Years of Personal Use	Number	Percent
Just Relaxing	281	95.3
Hiking	251	85.1
Wildlife Observation	203	68.8
Fishing	159	53.9
Swimming	153	51.9
Picnicking	134	45.4
Sunbathing	127	43.1
Landscape Photography	104	35.3
Other Nature Study	99	33.6
Motor Boating	97	32.9
Kayaking/canoeing	84	28.5
Other Boating	71	24.1
Winter Play	56	19.0
Running/jogging	38	12.9
Bicycling	36	12.2
Sailing	28	9.5
Driving OHV/motorcycles	27	9.2
Camping (primitive)	25	8.5
Tubing	25	8.5
Water Skiing	21	7.1
Horseback Riding	17	5.8
Camping (developed)	8	2.7
Total	2,044	

Table 11. Primary recreation activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999 (n = 287).

Activity	Number	Mean	Standard Deviation	Min	Max
Aquatics	224	2.8	1.7	1	8
Land Based	261	2.8	1.6	1	10
Visual	287	2.4	1.0	1	4

Table 12. Correlation of primary recreation activities of cabin owners with age in the Project 184 area of the El Dorado National Forest - summer of 1999.

Variable	Age	Aquatics	Land Based	Visual
Age	1			
Aquatics	-0.275	1		
Land Based	-0.211	0.452	1	
Visual	0.013	0.259	0.283	1

Table 13. Other activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Other Personal Activities	Freq.	Percent	Cum.
Snowshoeing in June	1	1.1	1
Botanical forays	1	1.1	2
Family reunion	1	1.1	3
Cabin maintenance	31	35.2	39
Visiting with family/friends	9	10.2	49
Writing	1	1.1	50
Walking	4	4.6	55
Painting	3	3.4	58
Being, cooking, eating	1	1.1	59
Hunting	6	6.8	66
Reading	8	9.1	75
Went downtown	1	1.1	76
Stargazing	1	1.1	77
Gathering pinecones	1	1.1	78
Golf	3	3.4	82
Cross-country skiing	3	3.4	85
Picking up litter	2	2.3	88
Campfires	1	1.1	89
Cutting wood	2	2.3	91
Playing games	1	1.1	92
Astronomy	1	1.1	93
Enjoying beauty	1	1.1	94
Music	1	1.1	95
Entertaining	1	1.1	97
Visit Tahoe casinos	1	1.1	98
Making art	1	1.1	99
Botany related	1	1.1	100
Total	88	100	

Table 14. Primary activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Primary activity	Number	Percent
Hiking	79	28
Sailing	1	.4
Motor boating	3	1
Water skiing	1	.4
Other boating	1	.4
Swimming	11	4
Wildlife observation	5	2
Other nature study	1	.4
Fishing	26	9
Sunbathing	1	.4
Picnicking	1	.4
Kayaking/canoeing	6	2
Just relaxing	117	41
All water related	2	1
Enjoying our cabin	1	.4
Cabin maintenance	14	5
Visiting friends/family entertaining	5	2
Walking	3	1
Reading	2	11
Work	2	1
Enjoying the beauty	1	.4
Total	283	100

Table 15. Secondary activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Secondary Activity	Number	Percent
Hiking	64	23
Motor boating	4	1
Water skiing	3	1
Other boating	2	1
Camping (developed)	1	.4
Swimming	18	7
Wildlife observation	14	5
Other nature study	6	2
Landscape photography	3	1
Fishing	47	17
Horseback riding	1	.4
Sunbathing	2	1
Picnicking	3	1
Running/jogging	2	1
Kayaking/canoeing	13	5
Driving OHV/motorcycles	3	1
Just relaxing	59	21
Botanical forays	1	.4
All water related activities	2	1
Cabin maintenance	9	3
Enjoying nature	3	1
Visiting friends/family, entertaining	5	2
Walking	4	1
Reading	1	.4
Reading	1	.4
Dog play	1	.4
Work	1	.4
Astronomy, astrophotography	1	.4
Wood cutting	1	.4
Total	275	100

Table 16. Other persons' activities while staying at the cabin from cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Activity	Frequencies	Percentages of Respondents (n = 295)
Hiking	266	90
Just relaxing	261	89
Fishing	220	75
Swimming	201	68
Wildlife observation	186	63
Sunbathing	175	59
Picnicking	139	47
Motor boating	113	38
Landscape Photography	111	38
Kayaking/canoeing	104	35
Other nature study	97	33
Running/jogging	81	28
Bicycling	66	22
Other boating	63	21
Sailing	57	19
Camping (primitive)	54	18
Winter play	52	18
Water skiing	44	15
Tubing	44	15
Driving OHV/motorcycles	37	13
Horseback riding	24	8
Camping (developed)	18	6
Total	2,361	

Other Areas

Locations Visited

The next question in the survey asked the respondents where they visited during their stay at the summer recreation cabin. There are 19 choices for responses and an additional "other" category. **Table 17** shows the rank ordered from highest to lowest frequency of responses to this question. The most popular destination is Lake Tahoe with 78.3% of respondents indicating that they visited it. The second most popular is Echo Lake with 56.9%. No other destination scored about 50%.

Locales Visited

Other locales that cabin owners said they visited are listed in **Table 18**. Wright's Lake with 15.9% and Cody with 11.0% were the only ones that scored about 10%. About 72% indicated that did not visit another locale.

Most Frequently Visited

The most frequently visited areas include Lake Tahoe with 25.3% and Echo Lake with 24.1% (Table 19). Silver Lake and the South Fork of the American River came in second and third, respectively with 17.6% and 13.0%. No other destination was listed by more than 6% of the respondents.

Second Most Frequently Visited

Lake Tahoe is the second most frequently visited area among cabin owners. **Table 20** shows that 30.7% of cabin owners listed it as the second most frequently visited area. The Desolation Wilderness came in second with 18.4% and Echo Lake came in third with 10.6%. No other destination was listed by 10% or more of the cabin owners.

Table 17. Locations visited by cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Location Visited	Frequencies	Percentages of Respondents n = 295
Lake Tahoe	231	78
Echo Lake	168	57
South Fork of the American River	117	40
Desolation Wilderness	112	38
Caples lake	96	33
Hope Valley	93	32
Silver lake	92	31
Silver Fork of the American River	86	29
Kirkwood	79	27
Fallen Leaf Lake	70	24
Lake Aloha	68	23
Woods Lake	50	17
Blue Lake area	43	15
Caples Creek	33	11
Schneider Camp	32	11
Mokelumne Wilderness	31	11
Lake Margaret	27	9
Showers lake	19	6
Margin Meadow	16	5
Total	1,463	

Table 18. Locations visited by cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Other Recreation Areas	Number	Percent
China Flats	1	1
Wright's Lake	13	16
Sierra @ Tahoe	1	1
Carson Pass area	3	4
Indian Springs	1	1
Lake Winnemucca	7	9
Granite Lake	2	2
Horsetail Falls	2	2
Angora Lakes	5	6
Tahoe Rim Trail	1	1
Thunder Mountain	1	1
Emigrant Lake	2	2
Cody	9	11
Shealor Lake	2	2
Raymond Lake	1	1
Pyramid Creek	2	2
Dick's Lake	1	1
Dardenelles	2	2
Frog Lake	4	5
Flagpole Peak	1	1
Loon Lake	1	1
Ice House	3	4
Alpine Meadows	1	1
Markleville	2	2
Nevada	1	1
Woodford	1	1
Sales Canyon	2	2
Lost Lake	1	1
Sly Park	1	1
Red Lake	1	1
Buck's Pasture	1	1
Silver Creek	1	1
Carson City	1	1
Mammoth	1	1
Butte Creek	1	1
Carson River	1	1
Hidden Lake	1	1
Total	82	100

Table 19. Locations visited by cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Most Frequently Visited Area	Number	Percent
Caples Lake	11	4
Silver Lake	46	18
Hope Valley	2	1
Lake Aloha	1	.4
Fallen Leaf Lake	1	.4
Kirkwood	1	.4
Silver Fork of the American River	6	2
South Fork of the American River	34	13
Echo Lake	63	24
Desolation Wilderness	14	5
Lake Tahoe	66	25
Carson Pass area	1	.4
Wrights Lake	2	1
Cody Meadows	1	.4
Pacific Crest Trail	1	.4
Echo Chalet	1	.4
Ice House	1	.4
Lake Audrain	1	.4
American River	5	2
Cody Lake	1	.4
Sales Canyon	1	.4
Red Lake	1	.4
Total	261	100

Table 20. Locations visited by cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Second most frequently visited area	Number	Percent
Caples Lake	20	9
Silver Lake	2	1
Hope Valley	1	.5
Lake Aloha	2	1
Mokelumne Wilderness	1	.5
Kirkwood	10	5
Silver Fork of the American River	9	4
South Fork of the American River	15	7
Echo Lake	23	11
Desolation Wilderness	40	18
Martin Meadows	1	.5
Lake Tahoe	67	31
Blue Lakes area	2	1
Woods Lake	3	1
Digger Indian Springs	1	.5
Woods Creek	1	.5
Union Lake Reservoir	1	.5
Carson Pass area	2	1
Wrights Lake	3	1
Ice House	3	1.
Dardanelles Lake	1	.5
American River	1	.5
Cody Lake	2	1
Winnemucca	1	.5
Woodford	1	.5
Sales Canyon	1	.5
Union Valley Reservoir	1	.5
Union Valley	1	.5
Silver Creek	1	.5
Butte Creek	1	.5
Total	218	100

Satisfaction with Environment and Preferences for Improvements

Satisfaction

We asked respondents about their satisfaction with the quality of the water levels, visual quality, parking, and facilities. On average, respondents ranked all except parking at 4 or higher on a scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied. Note the mean (average) scores shown in **Table 21**. Parking received a mean score of 3.8 that is somewhat lower than the others.

Improvements or Changes

We asked respondents what types of improvements or changes they want, and they wrote in a variety of responses that we aggregated into the categories shown in **Tables 22 through 32**. [Note: Some of the "Types of Repairs" variables in these tables were truncated by the firm supplying the data and not by the preparers of this report.]

Roads, Bridges, and Docks

The most frequently made suggestions involved improvement to roads, bridges, and docks: 48 respondents (23.0%) made such suggestions that are shown in **Table**22. Note that only 3 of the 48 specifically mentioned bridges and only 1 mentioned docks. One respondent also mentioned drainage, which fit in this table containing suggestions for improvements in roads and bridges.

No Change

The second most frequently made suggestion was for "no change." The responses of the 44 people (22.1%) who wanted no change are summarized in **Table 23**.

Higher Water Levels in Lakes

The third most frequently made suggestion involved higher water levels in the lakes. The responses of the 27 people (13.0%) are shown in **Table 24**. Generally, these respondents indicated that they wanted higher water levels in the fall and winter.

Parking

The fourth most frequently made suggestion involved parking. The responses of the 19 people (9.2%) are shown in **Table 25**. These respondents indicated that they wanted more parking places and better maintenance of facilities.

Less Traffic, Noise, and Litter

The fifth most frequently made suggestion involved traffic, noise, and litter. The responses of the 17 people (8.2%) are shown in **Table 26**. Generally, these respondents indicated that they want slower traffic and less noise on the roads and waterways. There was one respondent who wanted to prohibit jet skis and one who wanted to prohibit off-road vehicles. One was also concerned about hikers who litter.

Trees

The sixth most frequently made suggestion involved trees. The responses of the 13 people (6.2%) are shown in **Table 27**. These respondents are concerned about too much logging, inadequate cleanup, and insufficient plantings.

Toilets, Garbage, and Water

The seventh most frequently made suggestion involved toilets, garbage, and water. The responses of the 7 people (3.4%) are shown in **Table 28**. Generally, these respondents are concerned about the quality of restrooms, drinking water, and garbage removal.

Cabins

The eighth most frequently made suggestion involved cabins. The responses of the 5 people (2.4% of the respondents) are shown in **Table 29**. These respondents are concerned with issues, such as getting water to their cabins and longer-term leases.

Higher Water Level in Streams and Creeks

The ninth most frequently made suggestion involved concern about getting higher water levels in streams and creeks. The responses of the 4 people (1.9% of the respondents) are shown in Table 30.

Camping

The next group of suggestions involved concern about camping. The responses of the 3 people who mentioned camping (1.4% of the sample) are shown in **Table 31**.

Miscellaneous Concerns

The last group of suggestions concerned miscellaneous issues that did not seem to belong in any of the previous groups or to have anything in common with other suggestions. These concerns are shown in Table 32. Some, such as "stock/plant river with more fish," are very clear, while other suggestions, such as "more water," leave much room for interpretation.

Table 21. Satisfaction of cabin owners with conditions near their cabin in the Project 184 area of the El Dorado National Forest - summer of 1999.

Variable	Number	Mean	Std. Dev.	Min	Max
Water levels	281	4.1	1.0	1	5
Visual quality	281	4.3	1.0	1	5
Parking	277	3.8	1.2	1	5
Facilities	266	4	1.1	1	5

Table 22. Repairs to roads, bridges, and docks.

Types of Repairs	Number	Percent
Repairs to the road/pave road	38	18.3
Be able to rebuild bridge across alder	1	0.5
Bridge repair	2	1.0
Better road from maintenance station to	1	0.5
Better drainage from Caltrans redo of t	1	0.5
Hwy shoulder needs improved to	1	0.5
minimize		
Widen highway	1	0.5
Easier winter access to cabins	1	0.5
Better docking facilities	1	0.5
Drainage improvements between Hwy	1	0.5
50 &		
Total	48	23.3

Table 23. No Change.

Types of Repairs	Number	Percent
No change	40	19.3
Maintain natural rustic setting	3	1.5
Keep changes to a minimum - you can't	1	0.5
Total	44	21.3

Table 24. Higher Water Level in lakes.

Types of Repairs	Number	Percent
Maintain water level until late October	20	9.6
Maintain lake water levels	1	0.5
Higher water level (in the fall)	1	0.5
Winter water	1	0.5
Water level too low, exposing hazards;	1	0.5
Slower release throughout the summer	1	0.5
Keep lake levels the way they were this	1	0.5
Open dam later to allow longer access	1	0.5
Total	27	13.1

Table 25. Parking.

Types of Repairs	Number	Percent
More parking for cars and boats	8	3.9
Fix parking area & bridge that were destroyed	3	1.4
Fix parking access on American River	1	0.5
or		
Parking is problem at Echo Lake	1	0.5
Long term parking at Echo Lake be	1	0.5
prohibited		
Bathroom/parking for Hwy 50 travelers	1	0.5
Better parking during winter snow	1	0.5
season		
Public parking improved	2	1.0
Cars not allowed to park on Hwy 50	1	0.5
Total	19	9.3

Table 26. Less traffic, noise, and garbage.

Types of Repairs	Number	Percent
Less destruction of forest by ski facility	1	0.5
Forest clean up/back country clean up	3	1.5
More trees to block view of freeway	1	0.5
Have PG&E clean up trees they cut	2	1.0
down		
Have forest service stop selling our	1	0.5
trees		
Plant more trees/replace trees	2	1.0
Eliminate logging of forest - causing	3	1.4
erosion		
Total	13	6.4

Table 27. Trees.

Types of Repairs	Number	Percent
Lower speed limit & enforce it where dr	2	1.0
Ban jet skis	1	0.5
Less traffic/noise on Hwy	9	4.2
Less fast motor boating, waterskiing	1	0.5
Less motor cross activity on private	1	0.5
roads		
Enforce speed limit on boats	1	0.5
Prohibit off road vehicle use-destroying	1	0.5
Better monitor day hikers who litter	1	0.5
Total	17	8.2

Table 28. Toilets, Garbage, Water.

Types of Repairs	Number	Percent
Garbage/litter pickup	2	1.0
Public restrooms & trash removal @	1	0.5
hors		
Drinking water (improvement)	2	1.0
Better toilet facilities	1	0.5
Piles of debris we can't burn due to re	1	0.5
Total	7	3.5

Table 29. Cabins.

Types of Repairs	Number	Percent
Connect cabin to E.I.D. water supply	1	0.5
Longer term leases	1	0.5
Have water available to cabin	1	0.5
The chance for us to buy the property	1	0.5
Improve condition of neighbor's cabin	1	0.5
Total	5	2.5

Table 30. Higher water level in streams, creeks.

Types of Repairs	Number	Percent
Water level in Alder Creek quite low	1	0.5
Drain Echo right after labor day	1	0.5
Increase water level in South Fork	2	1.0
American River		
Total	4	2.0

Table 31. Camping.

Types of Repairs	Number	Percent
No unimproved camping along the creeks	1	0.5
An area for public to camp @ trailhead	1	0.5
Lowered camper density	1	0.5
Total	3	1.5

Table 32. Miscellaneous.

Types of Repairs	Number	Percent
Put a pump to the river	1	0.5
Stock/plant river with more fish	3	1.4
Electricity	2	1.0
Twin bridges store on Hwy 50 restored	1	0.5
A good trail around lake for mountain bikes	1	0.5
Like to see something done about old be	1	0.5
Move rocks into river that were deposited	1	0.5
Forest svc cabin occupied by forest svc	1	0.5
Get rid of horses camped @ south end-	1	0.5
ро		
Do not build hiking trails on or near t	1	0.5
Extension of commercial boat taxi svc	1	0.5
Allow closing of gates in winter months	1	0.5
Less interference by gov't & cabin asso	1	0.5
More water	1	0.5
Communications on when roads are	1	0.5
open		
Keep power lines out	1	0.5
No dam on American River	1	0.5
Total	20	9.9

Water Levels and People

Activities Affected

We asked respondents if the level of water near their cabins was sufficient for them to participate in the types of activities that they enjoy. An overwhelming majority (89.3%) said "yes." The results are shown in **Table 33**. Then we asked the 10.7% who said "no" which activities they could not participate in due to low water. Their responses are shown in **Table 34**. As expected, most of the activities that are restricted are water based. Surprisingly, however, some, such as driving off-highway vehicles (OHV's), "just relaxing," bicycling, and horseback riding, have no apparent connection with the water.

People Expected to See

Next, we asked respondents about the number of people they expected to see. Almost three quarters (74.2%) said they saw "about as many" as expected, 16.2% saw more than they expected, and only 8.2% saw fewer. These results are shown in **Table 35**.

Preferred to See

When we asked if they saw as many people as they preferred to see, again about three quarters (74.9%) responded that they saw "about as many." As shown in **Table 36**, 13.8% saw more than they preferred and 11.3% saw fewer than expected.

Table 33. Satisfaction of cabin owners with water conditions in the Project 184 area of the El Dorado National Forest - summer of 1999.

Did water conditions allow activities?	Number	Percent
Yes	250	89
No	30	11
Total	280	100

Table 34. Water too low for activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Activities	Number	Percent
Motor boating	13	4.4
Fishing	13	4.4
Swimming	12	4.1
Kayaking/canoeing	7	2.4
Other boating	6	2.0
Hiking	5	1.7
Water skiing	4	1.4
Wildlife observation	4	1.4
Photography	4	1.4
Driving OHV	4	1.4
Sunbathing	3	1.0
Just relaxing	3	1.0
Tubing	3	1.0
Sailing	3	1.0
Bicycling	2	0.7
Running/jogging	2	0.7
Camping (primitive)	2	0.7
Camping (developed)	1	0.3
Other nature study	1	0.3
Horseback riding	1	0.3

Table 35. Water too low for activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Number of people expected to see	Number	Percent
About as many	210	74.2
More	47	16.6
Fewer	26	9.2
Total	283	100.0

Table 36. Water too low for activities of cabin owners in the Project 184 area of the El Dorado National Forest - summer of 1999.

Number of people wanted to see	Number	Percent
About as many	212	74.9
More	39	13.8
Fewer	32	11.3
Total	283	100.0

Conclusions

Demographic Profile

Cabin owners in the El Dorado National Forest are typically white, in their early 60's, college-educated with above average income. The average household size is 2.5.

Ownership Profile

Typical cabin owners have used their cabin for 33 years. On the average, they travel 2.8 hours to get to their cabins that they use about one-third of the time from June through September. Cabins are typically occupied about 50% during the same time period. During October, their cabins are occupied 6 days on the average.

Activities

The most popular activity of the cabin owners is "just relaxing." On the average cabin owners listed 6.9 activities in which they participated. The top 7 are, in order of popularity: "just relaxing," hiking, wildlife observation, fishing, swimming, picnicking, and sunbathing.

The most popular primary activity is also "just relaxing" with 41.3% percent of cabin owners indicating this. The second most popular primary activity is hiking (a distant second with only 27.9%).

Locations and Locales Visited

Their favorite place to visit is Lake Tahoe with 78.3% of respondents listing it as a place they visit while staying in their cabins. Echo Lake is the second most popular place to visit with 56.9% saying that they visited it. No other destination scored above 50%.

Wright's Lake, which 15.9% of respondents visited, and Cody with 11.0% were the only locales that scored above 10%. About 72% indicated that did not visit another locale.

Satisfaction

On the average respondents ranked satisfaction with the water level, visual quality, and facilities at 4 or higher on a scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied. Respondents were somewhat less satisfied with parking; they gave it a mean of 3.8.

An overwhelming majority, 89.3%, said that the level of water near their cabins was sufficient for them to participate in the types of activities they enjoy. As expected, most of the activities that are restricted are water based. However, surprisingly, some, such as driving off-highway vehicles (OHV's), "just relaxing," bicycling, and horseback riding, have no apparent connection with the water.

About three-quarters of the people saw "about as many" people as they expected to see and as they preferred to see. Of the remaining 25%, a little more than half saw more than they expected to see and more than they preferred to see with the rest seeing fewer than expected and preferred.

Improvements or Changes

The most frequently made suggestion involved highways and bridges; 23.0% of respondents recommended improving the quality of highways and/or bridges. The 22.1% recommending "no change" was a close second to the 23.0% wanting improvements in highways and bridges; 13.0% wanted higher lake levels. Respondents were also concerned about improving parking and reducing traffic, noise, and litter. Some respondents were also concerned about too much logging, inadequate cleanup, and insufficient tree plantings.

APPENDIX A

SUMMER RECREATION CABIN OWNER/USER SURVEY

Survey Research Center
California State University, Chico
Chico, California 95929

1-800-477-8783

SUMMER RECREATION CABIN OWNER/USER SURVEY

This questionnaire is the final part of a summer-long survey of selected recreation cabin owners/users in the Eldorado National Forest to find out about the different ways that people use their cabin and the surrounding area. The information collected in this survey will help the U.S.D.A. Forest Service better manage recreation areas in the Eldorado National Forest, and will be used as part of the re-licensing for the El Dorado Hydroelectric Project. It should take about ten to fifteen minutes for you to complete the survey.

<u>Who Should Complete This Questionnaire?</u> The person who responded to the monthly calendars sent this past summer should complete this questionnaire. If the calendars were not returned, then the owner of record or the person who is most familiar with use of the cabin this past summer should complete the survey.

<u>Instructions</u>: Please complete each question by filling in the blank, checking the box beside the answer that best applies to you, or by circling the response that best answers the question for you.

1.	Which of the following categories best describe you? owner/co-owner of the summer recreation cabin family member of the owner/co-owner of the summer recreation cabin friend of the owner/co-owner of the summer recreation cabin
	other (please describe:)
2.	For how many years have you personally being using the recreation summer cabin? YEARS
3.	About how far in miles is it from your permanent home to the recreation summer cabin? MILES
4.	How many hours and minutes of traveling time does it take for you to get to the summer recreation cabin from your permanent home? HOURS MINUTES
5.	Between June and September of this year (1999), approximately what percent of the time was your summer recreation cabin occupied? %

Between June and S time did you persona	eptember of this year (19 lly occupy your summer		
7. How many days was year? DAYS	your summer recreation	home occupied <u>in Octo</u>	ober of this
In which of the follow near your summer re	ing activities <u>did you per</u> creation cabin this past s		
Hiking Sailing Motor boating Water skiing Other boating Camping (primitive) Camping (developed) Other activities (please	Landscape Photography Fishing e write them in)	Sunbathing Picnicking Running/jogging	Driving vehicles/ motorcycles off-highway Just relaxing Tubing Winter play
secondary activities	while recreating near you	ır summer cabin this pa	
Secondary Activity: _			
10. In which of the follow recreation cabin part (Check all that apply.	cipate while recreating r		
Hiking Sailing Motor boating Water skiing Other boating Camping (primitive) Camping (developed) Other activities (please	Swimming Wildlife observation Other nature study Landscape Photography Fishing	Horseback riding Bicycling Sunbathing Picnicking Running/jogging	Kayaking/canoeing Driving vehicles/ motorcycles off-highway Just relaxing Tubing Winter play

11. Which of the fol recreation cabir							ing at y	our sum/	mer
Caples Lake Silver Lake Hope Valley Lake Aloha Fallen Leaf La Mokelumne W Kirkwood Silver Fork of Lake Margare	Vilderness the Americar	n River		Mai Lak Sho Car Wo Sch	rtin M e Tah owers oles C Bl ods L nneide	Lake Creek ue Lak	es area		
South Fork of Echo Lake	the America	n River							
11a. Of these a	reas, which a	area di	d you v	isit m	ost fr	equent	t ly ?		
	d most frequ								
12. On a scale of 1 satisfied would recreation cabir	you say you v	were w	ith the fo						
	Very Dissat		Dissat	isfied	Neu	ıtral	S	Satisfied	_
Water levels Visual quality (la 5	Very Satisfi 1 andscape)	<u>ea</u> 1	2	2	3	3	4	4	5
Parking Facilities	1 1		2 2		3		4 4		5 5
13. What <u>changes</u> or recreation cabir		ents wo	uld you	like to	see r	made n	ear you	ur summe	er

	itions near your summer ro ed activities during this pa		ou to participate
	activities were you <u>not ab</u> ck all that apply)	<u>ole</u> to participate in at ti	mes during the
Hiking Sailing Motor boating Water skiing Other boating Camping (primitive) Camping	Swimming Wildlife observation Other nature study Photography Fishing	Horseback riding Bicycling Sunbathing Picnicking Running/jogging	Kayaking/canoeing Driving vehicles/ motorcycles off-highway Just relaxing Tubing Winter play
(developed) Other (specify:)		
you <u>expected</u> to so I saw ABOUT AS I saw MORE peo	statements below best d see near your summer red S MANY people as I expected to see than I expected to see	creation cabin this past cted to see. e.	
	statements below best d preferred to see near you		
I saw MORE peo	S MANY people as I wante ople than I wanted to see. eople than I wanted to see		
will be kept strictly c	ons are for statistical pu onfidential. They will be the survey and only rep	combined with respon	
17. How many people	live in your household?	PEOPLE	

18. Do you have a disability? YES NO 19. In what year were you born? 20. Which cultural or ethnic group do you most closely identify with? Native American or Alaskan native
NO 19. In what year were you born? 20. Which cultural or ethnic group do you most closely identify with? Native American or Alaskan native
20. Which cultural or ethnic group do you most closely identify with? Native American or Alaskan native Asian or Pacific Islander Black or African American, not of Hispanic origin Hispanic 21. Which category best describes the highest education level that you have completed? High school not completed High school graduate High school graduate Some college 22. Which category best describes your annual household income? Under \$10,000 \$60,000-\$79,999 \$10,000-\$19,999 \$80,000-\$99,999
Native American or Alaskan native Asian or Pacific Islander Black or African American, not of Hispanic origin Hispanic 21. Which category best describes the highest education level that you have completed? High school not completed High school graduate Some college 22. Which category best describes your annual household income? Under \$10,000 \$60,000-\$79,999 \$10,000-\$19,999 \$80,000-\$99,999
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completed? High school not completed High school graduate Some college 22. Which category best describes your annual household income? Under \$10,000 \$60,000-\$79,999 \$10,000-\$19,999 \$80,000-\$99,999
High school graduate Some college 22. Which category best describes your annual household income? Under \$10,000 \$60,000-\$79,999 \$10,000-\$19,999 \$80,000-\$99,999
Under \$10,000 \$60,000-\$79,999 \$10,000-\$19,999 \$80,000-\$99,999
\$10,000-\$19,999 \$80,000-\$99,999
\$30,000-\$39,999 More than \$200,000 \$40,000-\$49,999 \$50,000-\$59,999
23. Do you have any comments about this survey?

