

**UPPER AMERICAN RIVER PROJECT**  
**(FERC Project No. 2101)**

**CHILI BAR PROJECT**  
**(FERC Project No. 2155)**

**Technical Report on**  
**Socioeconomic Conditions -**  
**Reach Downstream of Chili Bar**

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## **REACH DOWNSTREAM OF CHILI BAR DAM SOCIOECONOMIC CONDITIONS TECHNICAL REPORT**

### **SUMMARY**

This report has been prepared in support of the relicensings of the Sacramento Municipality District's Upper American River Project (UARP) and Pacific Gas and Electric's Chili Bar Project. The UARP Relicensing Socioeconomic Technical Working Group (TWG) identified the need to have a report that provided a broad description of the current socioeconomic conditions along the 19.1-mile-long section of the South Fork American River (SFAR) from Pacific Gas and Electric Company's Chili Bar Dam to the normal high water line of the United States Bureau of Reclamation's (BOR) Folsom Reservoir (referred to in this report as the Reach Downstream of Chili Bar). The TWG also requested that the report generally address how the current socioeconomic setting might be affected by the combined operation of the UARP and Chili Bar Project. This report was prepared by reviewing existing information and conducting interviews of individuals identified by the TWG who may have knowledge of current socioeconomic conditions.

The combined operations of the UARP and Chili Bar Project have, in part, created a mature whitewater boating industry, which compliments local tourism and recreation-related activities in the Reach Downstream of Chili Bar. The whitewater boating industry is estimated to be worth about \$33 million in revenues and taxes to El Dorado County, with the whitewater boaters by themselves contributing an estimated \$13.4 million to \$17 million. This industry supports commercial establishments and county and state parks, primarily in the Lotus-Coloma communities, which may provide seasonal and full time employment opportunities. Both the county and BOR issue permits and collect fees from the commercial boaters.

Many of the businesses interviewed indicated that they are dependant on the flows in the SFAR and that the relationship between the dependability and predictability of the flows in the SFAR is important to the economic health of the region.

### **1.0 INTRODUCTION**

This technical report, which is one in a series of a reports, was prepared by Devine Tarbell & Associates (DTA) for the Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric Company (jointly referred to as the Licensees) to support the relicensing of SMUD's Upper American River Project (UARP) and Pacific Gas and Electric Company's Chili Bar Project. This report addresses the socioeconomic condition in the 19.1-mile-long section of the South Fork American River (SFAR) from Pacific Gas and Electric Company's Chili Bar Dam to the maximum water surface elevation (480 feet) of the United States Bureau of Reclamation's (USBR) Folsom Reservoir (referred to in this report as the Reach Downstream of Chili Bar).

This technical report does not include a detailed description of the UARP Alternative Licensing Process (ALP) or the UARP, which can be found in the following sections of SMUD's application for a new license: Exhibit A (Project Description), Exhibit B (Project Operations), and Exhibit C (Construction). Nor does this technical report include a detailed discussion of Pacific Gas and Electric Company's relicensing process or the Chili Bar Project, which can be found in Pacific Gas and Electric Company's Chili Bar Project First Stage Consultation Document (FSCD).

In addition, this technical report does not include a discussion regarding the effects of the combined UARP and Chili Bar projects on socioeconomic condition except in a broad sense, nor does the report include a discussion of appropriate protection, mitigation, and enhancement measures. An impacts discussion regarding the UARP is included in SMUD's applicant-prepared preliminary draft environmental assessment (PDEA) document, which is part of the SMUD's application for a new license for the UARP.

This report is organized according to the following major topics:

- **BACKGROUND** – Includes when the study plan was approved by the UARP Relicensing Plenary Group; a brief description of the issue questions addressed by the study plan, the objectives of the study, the study area, and agency requested information relevant to this study.
- **METHODS** – A description of the methods used in the study.
- **RESULTS** – A description of socioeconomic data relevant to the Reach Downstream of Chili Bar.
- **LITERATURE CITED** – A listing of all literature cited in the report.

## 2.0 BACKGROUND

### 2.1 Chili Bar Socioeconomic Study Plan

The UARP Relicensing Socioeconomic Technical Working Group (TWG) developed the Chili Bar Socioeconomic Study Plan and the TWG approved this plan on December 12, 2003. The UARP Relicensing Plenary Group approved the plan on January 7, 2004. The study plan was designed to address, in part, the following issues questions developed by the Plenary Group:

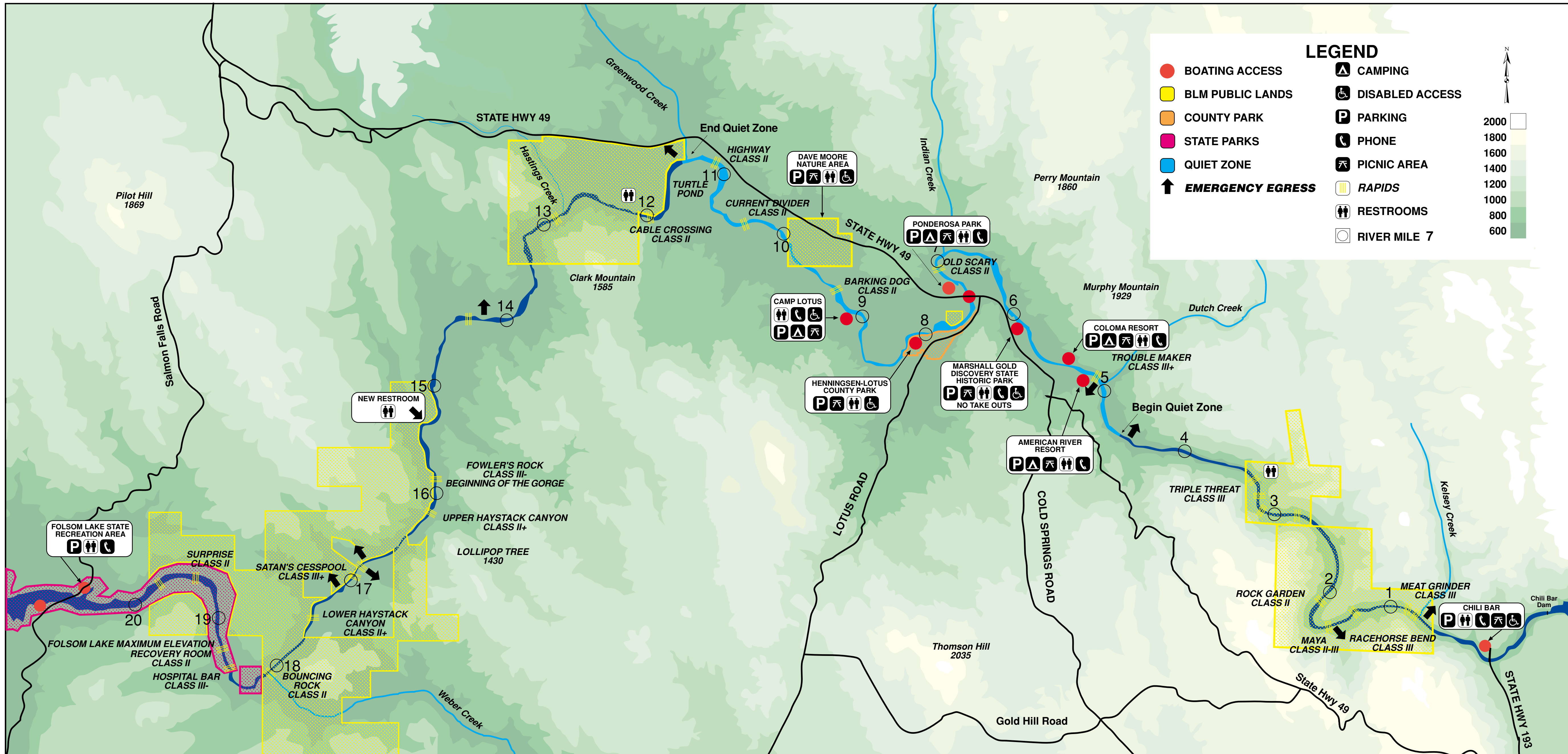
- What are the socioeconomic benefits (direct, indirect and induced) and costs of the UARP and Chili Bar projects to El Dorado County and the Region?

The objectives of the Chili Bar Socioeconomic Study were to:

- Provide a broad description of the current socioeconomic setting in the Reach Downstream of Chili Bar.
- Identify how the combined operations of the UARP and Chili Bar Project might affect the current socioeconomic setting into the future.

The study area consisted primarily of the lands adjoining the Reach Downstream of Chili Bar, with particular emphasis on the Lotus-Coloma area (Figure 2.1-1). Information was gathered for other areas as well, but the level of effort was inversely proportional to the distance from the reach. The presumption was that the more distant an area is from the reach, the less flows in the reach would affect on the socioeconomic setting of the area. However, some information was collected for El Dorado County as a whole. This information is also presented and identified as such in the text of the report with qualitative discussion of the Reach Downstream of Chili Bar, as appropriate.

# SOUTH FORK AMERICAN RIVER PUBLIC ACCESS



### LEGEND

- BOATING ACCESS
- BLM PUBLIC LANDS
- COUNTY PARK
- STATE PARKS
- QUIET ZONE
- ↑ EMERGENCY EGRESS
- ▲ CAMPING
- ♿ DISABLED ACCESS
- P PARKING
- ☎ PHONE
- 🍴 PICNIC AREA
- 🚻 RESTROOMS
- RIVER MILE 7

2000

1800

1600

1400

1200

1000

800

600

## CHILI BAR RUN MILE BY MILE GUIDE

- 0 Chili Bar River Access. Fees charged.
- 0.5 BLM public land to mile 3.4.
- 0.6 Meatgrinder Rapid. Class III+.
- 1.3 Racehorse Bend Rapid. Class II+.
- 1.5 Maya Rapid. Class II-III.
- 1.8 Rock Garden Rapid. Class II.
- 2.0 African Queen Rapid. Class II.
- 3.1 Triple Threat Rapid. Class III. Miner's Creek, on river right, is a recommended lunch stop with restroom facilities.
- 4.4 Indian Creek enters on river left. **Beginning of Quiet Zone.**
- 5.2 Troublemaker Rapid. Class III+.
- 5.2 American River Resort River Access and Campground. Fees charged.
- 5.5 Coloma Resort River Access and Campground. Fees charged.
- 5.6 Coloma Bridge, built in 1917.
- 5.7 Sutter's Mill site.
- 6.0 Marshall Gold Discovery State Historic Park - North Beach River Access Area. Fees charged. Picnic and restroom facilities. **Take-outs are prohibited.**
- 7.1 Old Scary Rapid. Class II.
- 7.4 Highway 49 Bridge River Access. Parking under bridge is prohibited.
- 8.0 Henningsen-Lotus County Park River Access. Fees charged.
- 9.0 Camp Lotus River Access and Campground. Fees charged. Barking Dog rapid. Class II.
- 9.7 BLM public land on river right (Dave Moore Nature Area) to mile 9.9.
- 10.6 Current Divider Rapid. Class II+.
- 11.2 Highway Rapid. Class II.
- 11.5 Greenwood Creek on river right. **End of the Quiet Zone.** BLM lands on river right to mile 13.4
- 12.0 Cable Crossing Rapid. Class II.
- 12.2 BLM public land on river right is a recommended lunch/camping area with restroom facilities.
- 12.8 There are several lunch/camping sites (no facilities) on BLM public lands between Hastings Creek and mile 13.4.
- 13.9 Gorilla Rock, or Convict Rock on river left.
- 15.0 Indian grinding holes atop large boulder on river right. Lollipop Tree, which marks the beginning of the Gorge, is visible here.
- 15.3 BLM public lands with restroom facilities
- 15.8 Fowler's Rock Rapid. Beginning of the Gorge. Class III+.
- 16.9 Satan's Cesspool Rapid. Class III+.
- 17.0 Son of Satan's Rapid. Class II+.
- 17.6 Lower Haystack Canyon Rapid. Class II+.
- 17.7 BLM land to mile 18.1. Weber Creek enters on river left at mile 18.1.
- 18.2 Bouncing Rock Rapid. Class II+.
- 18.6 Hospital Bar Rapid. Class III.
- 18.7 Recovery Room Rapid. Class II+.
- 18.8 Folsom Lake maximum elevation.
- 19.4 Surprise Rapid. Class II+. Class II rapids continue to mile 20.
- 20.5 Salmon Falls Bridge take-out on the right bank upstream of the bridge.



### 3.0 METHODS

The Licensees' methods conformed to the methods approved by the UARP Relicensing Plenary Group. The methods consisted of reviewing existing data sources and conducting interviews to develop a broad description of the current socioeconomic setting along the Reach Downstream of Chili Bar, and how this current socioeconomic setting might be affected by the combined operation of the UARP and Chili Bar Project.

The study was performed in two steps, each of which is described below.

**Step 1: Review Available Information** – A review of existing data was performed. Sources of these data included: a Ph.D. Dissertation by Kelly S. Bricker for the Pennsylvania State University and the Bureau of Land Management; information from the U.S. Bureau of Land Management; U.S. Census Bureau, U.S. Housing and Urban Development Department, El Dorado County Economic Development Office, and State of California and local databases. The goal of the review was to: 1) describe the local and regional population and trends including seasonal changes where possible; and 2) describe, in general, current economic conditions in housing, construction, recreation and tourism, employment, earnings per capita and tax base.

**Step 2: Interviews** – Telephone interviews were performed with individuals who could add to the description of the current socioeconomic conditions in the study area and how the combined operations of the projects might affect that condition. Interviewees included:

John Hutchinson – Marshall Gold State Park  
Candie Bliss – Coloma Country Inn  
Scott Underwood – Mother Lode River Center  
Nate Rangel, Owner- Adventure Connection  
Bill Center, Owner– Camp Lotus  
Sue Welter, Owner – The River Store  
Michael Gray – El Dorado County Parks and Recreation  
Judy Huestis – Re Max Gold  
Liz Boyd – ERA Realty  
Mannie Shaffer – American Land and Home  
Jim Eicher – Bureau of Land Management  
Shawna Purvines – El Dorado County Economic Development  
Laural Brent-Bumb – El Dorado County Chamber of Commerce  
Jerry Ashburn – Earthtrek Expeditions  
Nate Tucker – Whitewater Excitement  
Manny Deakuino – Coloma-Lotus Fire Department  
Tanya Donnelly – El Dorado County Sheriff's Department

Other people were contacted or were attempted to be contacted, but either were not available or chose not to participate in the survey.

The questions asked during the interviews consisted of:

**To all interviewed:**

- Please describe your relationship with activities associated with the SFAR.
- Where do you live/work in relation to the river?
- How long have you been in the area?
- On average, how often (days/year) do you partake in an activity that brings you to the river? For boating, picnicking, sightseeing, swimming, wildlife viewing, etc?
- Do you have a sense for the general magnitude, duration and frequency of various flow levels in the river? If so, what is your sense of how often the flow is about 200 to 300 cfs; 1,000 to 1,500 cfs; 1,500 cfs or more?
- What is your perspective on the relationship between the dependability and predictability of flows in the SFAR with the economic health of the region? How do you see this affecting the issues that you deal with as part of your business or professional responsibilities?

**Specific to Homeowners:**

- Can you see the river from your home?
- How often do you spend the day on or near the river at your house?
- To what extent is your use and enjoyment of the river dependent on/affected by specific flow levels? What are those flow levels?

**Specific to Business Owners:**

- What type of business do you operate?
- Which business sector is your business within? (retail, recreation, manufacturing, tourism, agriculture)
- How many people do you employ?
- How many full time employees (FTE) are dependent on your SFAR river-related businesses?
- How many individual employees are primarily dependent on the SFAR river related business?
- What are the socioeconomic impacts associated with seasonal employment?
- How many adults who are not employees are primarily supported by this business?
- What is the annual payroll of your business? (a range will be provided to chose from)
- Is your business a seasonal business? If so please indicate the months that you operate. (*Jan., Feb., March, ...*)
- Is your business dependant on river flows? (*yes/no*)
- Which months of the year is your business most dependent on flows in the river?
- Which of those months affect your business the most?
- What would happen to your business if you expected a certain flow in the river and it did not occur?
- Can you describe the flow levels that cause a substantial change in your business?
- If you are a commercial outfitter, about what percent of your customers are repeat customers on the SFAR?

- To what extent is your business dependent on flows in the river as compared to other conditions such as roads, general economy, season, weather conditions, local government regulations, etc.?
- If you provide opportunities for river access and/or use please provide the number of people that use your services per year and a breakdown of how far people travel to use your business (*less than 1 hour/ 1 - 4 hours/ 4-8 hours*) and average expenditures per person per visit.
- What percentage of your business is dependent on boatable flows? How important is dependability and predictability of those flows?
- If there were not reliable summer boating flows on the South Fork for a period of time, how long would it be until you went out of business or shut down your business?

**Specific to Chamber of Commerce/Economic Development Office/and appropriate County Officials:**

- How many SFAR related businesses are there in the Georgetown/Placerville/Cameron Park area and the Coloma/Lotus area? Please list the types of river related businesses that are present.
- What does the local economy primarily consist of (*retail, recreation, manufacturing, agriculture, tourism*)?
- Please provide specifics of the sector(s) identified in the question above.
- What is the annual money (as applicable) generated from recreation, tourism, retail, and agricultural sectors.
- What are the fastest growing sectors in the past 5 years?
- How is this growth reflected in housing, retail, commercial, recreational and industrial construction?
- How have the changes in the economy and sectors (identified above) over time affected the make up of the community?
- What are most people looking for when they move to the Coloma-Lotus Community?
- What are most people looking for when they move to the West Slope El Dorado County?
- Why do businesses want to move to/from the community? (*taxes, availability of labor, location, quality of life, municipal services*)
- Why do most people want to move to/from the community? (*employment, retirement, taxes, housing, quality of life, municipal services*)
- Has there been an increase in services for families over the past 10 years i.e.: school construction, school enrollment, health care etc? (*yes/no*)
- If yes please describe.
- What is the most valuable resource to the community from an economic standpoint?
- How many hotel/motel/bed and breakfast rooms are there in the Georgetown/Placerville/Cameron Park area?
- How many hotel/motel/bed and breakfast rooms are there in the Coloma-Lotus area?
- Is there a demand for additional lodging in each of these two areas?
- How many restaurants are there in the Georgetown/Placerville/Cameron Park area?
- How many restaurants are there in the Coloma-Lotus area?
- Is there a demand for additional restaurants in each of these two areas?



- Is there a correlation between lodging and restaurant use and users of the river?
- Has there been a change in the numbers of hotel/motel/bed and breakfast rooms and restaurants in the two areas described above?
- What is the primary reason for the change in numbers of lodging rooms/restaurants in each of these two areas?
- How is the local economy dependant on river flows?
- How many FTEs are dependent on SFAR river related businesses?
- How many individual employees are primarily dependent on the SFAR river related business?
- What are the socioeconomic impacts associated with seasonal employment?
- How many adults who are not employees are primarily supported by this business?

**Specific to Real Estate Agents:**

- Please provide information on general property values by sector (as applicable): riverfront property, off river property, residential, agricultural, commercial, manufacture/industrial.
- What are the median values of houses, condos, raw land (riverfront/non-riverfront), agricultural land, and commercial real estate?
- What is the trend in property values on or very near to the river over the past 5 years, and how does that trend compare to other properties in the area not on or very near to the river?
- Please provide the number of houses and commercial properties sold over the past 5 years.
- How are taxes in the community viewed? (*high, low, as expected*)
- Does the reliability/predictability of river flows have any effect on property values? (*yes/no*) If yes, please explain.
- Do other factors such as, and not limited to, the actual and potential increase in government owned lands have any affect on property values and marketability?
- Why do most people want to move to/from the community? (*employment, retirement, taxes, housing, quality of life, municipal services*)

**Specific to Public Lands Managers and Law Enforcement:**

- What are the costs and incomes to your agency that you attribute to the SFAR?
- How do you see these costs and incomes affected by the predictability and reliability of flows in the river?

## **4.0 RESULTS**

### **4.1 Overview**

The SFAR watershed is approximately 804 square miles in an area with topographic relief ranging from 480 feet at the Folsom Reservoir to approximately 10,000 feet in the Sierra's at the head of the watershed (El Dorado County 2001). The Reach Downstream of Chili Bar is located entirely within El Dorado County. The communities of Coloma and Lotus are the largest communities located along this stretch of the river.

The SFAR has a history of development along the river. Major diversions began in the 1850’s primarily to support the mining industry along with other agricultural and consumptive uses. The SFAR has not been a true “unimpaired” or “natural flow” river for at least 150 years (El Dorado County 2001). In the late 1950’s the UARP was constructed upstream of the reach. Pacific Gas and Electric Company’s Chili Bar Project was constructed in 1964 and became operational in 1965. The flow regime during the summer and fall recreation season is much more reliable and thus conducive to recreation than it would have been without development of water resources projects such as SMUD’s UARP and Pacific Gas and Electric Company’s Chili Bar Project (El Dorado County 2001). Both projects are regulated by the FERC and are operated under the license conditions set forth in the FERC licenses.

Recreation along the SFAR is high due to the area’s proximity to the major population centers of Sacramento, San Francisco and Reno. Recreation includes both land and water based activities such as hiking, fishing, camping, and whitewater boating. The regulation of water flows in the river and strong public interest in whitewater boating and related activities have resulted in the SFAR becoming a preferred destination among whitewater boaters.

## 4.2 Regional – El Dorado County

### 4.2.1 Demographics

The Reach Downstream of Chili Bar is located within El Dorado County, California. El Dorado County encompasses 1,805 square miles over half of which is in public ownership in the form of national forests and various parks and recreation areas. El Dorado County stretches across 90 miles of foothills, valleys and mountain peaks from the Central Valley of California on the west to the State of Nevada on the east. The population of the entire county based on the 2000 census was 156,299. Population data from the U.S. Census Bureau for El Dorado County is presented below in Table 4.2.1-1.

**Table 4.2.1-1. El Dorado County population and density for 1970, 1980, 1990, and 2000.**

	2000					1990				1980		1970
	Total Number	Density	% change since 1990	% change since 1980	% change since 1970	Total Number	Density	% change since 1980	% change since 1970	Total Number	% change since 1970	Total Number
<b>Population</b>	156,299	91.4	24	82	257	125,995	74	47	187	85,812	96	43,833
<b>Housing Units</b>	71,278	41.7	16	58	200	61,451	n/a	37	157	44,987	89	23,871

Source: U.S. Census Bureau, 2000 Census.

The population of El Dorado County nearly doubled (97 percent increase) from 1970 to 1980 and has since experienced more gradual increases with 47 percent growth from 1980 to 1990, and 24 percent growth from 1990 to 2000. Overall, since 1970, the population of El Dorado County has grown 257 percent. Growth rates in housing units were very similar during the same time period with a 200 percent growth since 1970.

#### 4.2.2 Population Distribution

Within El Dorado County, there are 13 Regional Analysis Districts (RAD), as defined by the Sacramento Area Council of Governments (SACOG). RADs may have the same name as community planning areas or city names but the boundaries are not the same and data is not gathered according to city/town boundaries. For population trending purposes, the RADs provide the best available localized breakdown of demographics for El Dorado County.

It is important to note that the Tahoe Basin incorporates the city of South Lake Tahoe and is included as part of El Dorado County for U.S. Census purposes. However, due to its geographic distance from the study area, much of the statistical data presented here exclude the Tahoe Basin and/or the city of South Lake Tahoe. Additionally, the data collected by the SACOG excludes the Tahoe Basin from its census area. Of the 13 RADs in El Dorado County, five immediately abut the Reach Downstream of Chili Bar: West Placerville, Georgetown, Coloma-Lotus, El Dorado Hills, and Pilot Hill. In 2000, these five RADs totaled 46,490 people, comprising 30 percent of the El Dorado County population when including the Tahoe Basin and 35 percent when excluding the Tahoe Basin.

During the last decade, the population of the selected RADs in the study area (Table 4.2.2-1) has grown by 34 percent. However, the five RADs abutting the river reach have grown 40 percent, with the El Dorado Hills RAD experiencing the largest growth at 101 percent. The Coloma-Lotus area RAD experienced a 35 percent increase in population between 1990 and 2001. A large majority of this growth may be attributable to the growth of bedroom communities along highway 50 heading east from Sacramento.

**Table 4.2.2-1. El Dorado County Regional Analysis Districts (RAD) in the vicinity of the Reach Downstream of Chili Bar.**

<b>Regional Analysis District (RAD)</b>	<b>2001</b>	<b>2000</b>	<b>1995</b>	<b>1990</b>
Cameron Park - Shingle Springs	28,050	27,713	24,164	20,638
Coloma – Lotus	7,904	7,752	7,035	5,847
Diamond Springs	12,200	12,168	11,672	10,448
East Placerville	5,468	5,250	4,947	4,613
El Dorado Hills	21,184	19,838	14,988	10,568
Georgetown	7,129	7,088	6,742	5,776
Mt. Aukum - Grizzly Flat	5,373	5,319	4,857	3,980
Pilot Hill	4,684	4,627	4,292	3,374
Pollock Pines	15,946	15,892	15,276	13,494
South Placerville	9,518	9,461	9,022	8,439
West Placerville	7,209	7,185	6,517	5,936
<b>RAD Totals</b>	<i>124,665</i>	<i>122,293</i>	<i>109,512</i>	<i>93,113</i>
Balance of County (excluding Tahoe Basin)	11,085	11,007	10,388	9,487

Source: Sacramento Area Council of Governments, Regional Data Center

### 4.2.3 Economic Conditions

#### 4.2.3.1 Housing

An estimated 58,939 housing units are occupied in El Dorado County. The median value is \$194,400 countywide with a more detailed breakdown in Table 4.2.3-1. This table uses Property values that have been rising over the past five years throughout El Dorado County according to the real estate brokers interviewed. However, the property values for homes/land on or near the SFAR are among the highest in the county; properties with riverfront access/views are typically even higher than properties in the valley associated with the Reach Downstream of Chili Bar (personal communications with: Liz Boyd, ERA Realty Center, February 10, 2004; Judy Huestis, RE/MAX Gold, February 11, 2004; and Mannie Shafer, American Heritage Land and Home, February 11, 2004). For example, the most recent Multiple Listing Service average for residential homes in Lotus is approximately \$500,000 for a 1,231 square-foot house on five acres of land. (GLPW Group Inc., web site accessed February 20, 2004).

**Table 4.2.3-1. El Dorado County: Financial Housing Characteristics, 2000**

	Occupied Housing Units	Owners	Renters
		Median Value (dollars)	Median Rent (dollars)
<b>El Dorado County</b>	58,939	194,400	617
<b>County Subdivision and Place</b>			
North El Dorado CCD	10,730	182,200	576
Georgetown CDP	431	157,400	559
Pollock Pines CDP (part)	985	128,200	519
Shingle Springs CDP (part)	48	216,700	814
Remainder of North El Dorado CCD	9,266	186,700	637
Placerville CCD	6,334	168,200	573
City of Placerville	3,996	156,500	556
Remainder of Placerville CCD	2,338	179,800	694
South El Dorado CCD	28,374	214,300	707
Cameron Park CDP	5,550	195,900	676
Diamond Springs CDP	1,995	144,000	646
El Dorado Hills CDP	5,946	279,700	1,152
Pollock Pines CDP (part)	929	159,200	795
Shingle Springs CDP (part)	924	197,800	642
Remainder of South El Dorado CCD	13,030	203,900	683
South Lake Tahoe CCD	13,501	170,300	582
South Lake Tahoe city	9,442	157,800	568
Remainder of South Lake Tahoe CCD	4,059	186,100	778

Source: U.S. Census Bureau, Census 2000

#### 4.2.3.2 Infrastructure

There are numerous two-lane roads and multilane roads throughout the region with numerous bridges crossing the SFAR. Several highways exist within the region including Highway 49 and Highway 193, which connect to Interstate 50 on the south side of the county and Interstate 80 beyond the north boundary of the county. Both interstates are major throughways connecting

major metropolitan areas such as the San Francisco Bay Area, Sacramento, the Lake Tahoe region and Reno, Nevada. International airports are located in Sacramento and Reno.

Two base hospitals service El Dorado County. Marshall and Barton Memorial hospitals are the designated paramedic base hospitals located in Placerville and South Lake Tahoe, respectively. Marshall is a fully accredited, acute care facility with 103 beds and a team of 860 employees. Barton Memorial Hospital is the designated paramedic base hospital located in South Lake Tahoe. Barton provides 24-hour emergency care, childbirth, ambulatory surgery, physical therapy, and rehabilitation services. The county is also serviced by two local health clinics in the cities of Placerville and South Lake Tahoe.

There are 15 school districts in El Dorado County. Total enrollment for the county in 2001 was 29,104 students; a one percent increase over 2000 and an 11 percent increase over 1991 levels (El Dorado County Office of Education, 2002).

#### 4.2.3.4 Employment

Roughly 84,000 people comprise the labor force in El Dorado County. Unemployment in 2003 ranged from 4.7 to 6.1 percent. The employment information since 1990 for El Dorado County is presented in Table 4.2.3-2.

**Table 4.2.3-2. Civilian labor force, employment, and unemployment for El Dorado County, 1990-2003.**

Year	Labor Force	Employment	Unemployment	Unemployment Rate
2003	83,792	79,325	4,458	5.3%
2002	82,300	78,200	4,100	5.0%
2001	79,500	76,300	3,200	4.0%
2000	77,300	74,100	3,200	4.1%
1999	79,100	76,000	3,100	3.9%
1998	76,700	72,900	3,800	5.0%
1997	75,700	71,600	4,100	5.4%
1996	73,700	69,100	4,600	6.2%
1995	72,100	67,100	5,000	6.9%
1994	70,600	65,600	5,000	7.1%
1993	67,300	61,500	5,800	8.6%
1992	67,300	61,600	5,700	8.5%
1991	65,400	61,100	4,300	6.6%
1990	64,000	61,200	2,800	4.4%

Source: State of California, Employment Development Department, Labor Market Information Division, El Dorado County

A more detailed account of employment statistics in El Dorado County is available from the Census Designated Place (CDP) county subdivision used in the 2000 Census (Table 4.2.3-3). In December 2003, the unemployment rate was highest in the city of Placerville at 7.6 percent with 4,530 unemployed persons in the city. The El Dorado Hills CDP had the lowest rate of unemployment at two percent with only 80 unemployed persons in December 2003.

**Table 4.2.3-3. Employment statistics for selected areas within the study area in El Dorado County, December 2003.**

Area Name	Labor Force	Employment	Unemployment	
			Number	Rate (%)
Cameron Park - CDP*	8,430	8,120	310	3.7
Diamond Springs – CDP	1,670	1,580	90	5.5
El Dorado Hills – CDP	4,160	4,080	80	2.0
Placerville – city	4,900	4,530	370	7.6
Pollock Pines – CDP	2,620	2,450	170	6.5
Shingle Springs – CDP	1,240	1,210	30	2.1

Source: State Of California, Employment Development Department, Labor Market Information Division, January 14, 2004.

The median household income for El Dorado County is \$51,481.

#### 4.2.3.5. Industry

The predominant industries in El Dorado County are retail trade, food services, and accommodation service providers. A breakdown of the industry statistics for El Dorado County is presented in Table 4.2.3-4.

**Table 4.2.3-4. Summary of industry statistics for El Dorado County (1997 NAICS Basis).**

Industry	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)	Shipmts/Sales/Recpts (\$1,000)
Manufacturing	144	1,775	56,352	287,861
Wholesale trade	108	684	19,283	249,670
Retail trade	546	4,894	91,146	926,764
Sporting goods stores	19	132	1,376	9,981
Real estate & rental & leasing	180	781	9,946	68,640
Recreational goods rental	17	n/a	n/a	n/a
Professional, scientific, & technical servs	262	1,478	74,394	165,947
Admin, spprt & waste mgmt & remediation serv	137	1,510	27,905	70,595
Educational services	21	157	3,396	10,302
Sports & recreation instruction	8	52	589	1,751
Health care & social assistance	314	1,781	47,160	127,506
Arts, entertainment, & recreation	50	1,774	15,856	56,512
Amusement, gambling, & recreation	42	1,739	15,610	55,339
Other amusement & recreation services	39	n/a	n/a	n/a
Accommodation & foodservices	410	5,539	55,345	208,973
Accommodation	120	1,962	23,548	93,364
Traveler accommodation	107	n/a	n/a	n/a
RV parks & recreational camps	12	78	1,794	8,283
Rooming & boarding houses	1	n/a	n/a	n/a
Foodservices & drinking places	290	3,577	31,797	115,609
Full-service restaurants	142	1,800	17,048	56,255
Limited-service eating places	121	1,633	13,361	53,380
Drinking places (alcoholic drinks)	23	135	1,202	5,211
Other services (except public admin)	174	692	13,147	53,422
<b>Total</b>	<b>2,273</b>	<b>23,907</b>	<b>342,152</b>	<b>1,082,419</b>

Source: U.S. Census Bureau, 1997 Economic Census: Summary Statistics for El Dorado County, CA .

Tourism is the strongest economic “engine” in El Dorado County (personal communication with Laurel Brent-Bumb, El Dorado County Chamber of Commerce, March 24, 2004).

### **4.3 Area Adjacent to Reach Downstream of Chili Bar**

#### **4.3.1 Economic Conditions**

The Reach Downstream of Chili Bar is located within the Coloma Valley, in the foothills of the Sierra. Two rural communities, Coloma and Lotus, are located along the Reach Downstream of Chili Bar. The surrounding area consists of ranches, vineyards, campgrounds and small-town businesses. Businesses located adjacent to the Reach Downstream of Chili Bar are services that support primarily tourism and recreation. These include businesses that support outdoor recreation, including retail, lodging, and restaurants. There are seven restaurants and two hotels with less than 100 hotel rooms in the Lotus-Coloma area. Many people work in these businesses on a seasonal basis from spring through the fall (personal communications with: Laurel Brent-Bumb, El Dorado County Chamber of Commerce, March 24, 2004; and Shawna Purvines, El Dorado County Economic Development Office, February 17, 2004).

The area surrounding the SFAR provides numerous recreational opportunities. The surrounding terrain supports a broad range of opportunities including hunting, fishing, camping, mountain biking, horseback riding, whitewater rafting, and kayaking.

Trail systems adjacent to the SFAR offer abundant opportunities for hiking. Some popular public hiking trails are located within the Dave Moore Nature Area, Henningsen-Lotus County Park, and the Marshall Gold Discovery State Historic Park. There are also a number of trails suitable for use by mountain bikers including the popular Salmon Falls Trail, just north of the SFAR inflow to Folsom Lake. Other recreational activities that are enjoyed by visitors include sightseeing, wildlife viewing, and hunting (El Dorado County 2001).

There are four major campgrounds in the Coloma-Lotus area. These include: Coloma Resort, American River Resort, Pondersosa Campground and Camp Lotus. These campgrounds are all located adjacent to the SFAR and have boating access, and with the exception of Ponderosa Park, each have the capacity to handle over 400 campers. There are also some additional private campgrounds maintained by outfitters along the river whose main purpose is to service rafting clients (El Dorado County 2001). The Henningsen-Lotus County Park is a day use facility that maintains facilities for organized sporting activities and provides river access.

Businesses that service vacationers and people using the river are connected to a certain degree to the whitewater boaters. Whitewater boating is the most popular form of outdoor recreation associated with the Reach Downstream of Chili Bar, attracting between approximately 60,000 to 150,000 users each year since 1992 (El Dorado County 2003). Busiest periods for these businesses are primarily from April to September, which corresponds to those months when rafting is most popular. Respondents noted that dependability of boatable flows in the river was vital to the success of these businesses and had an effect on the economic health of the region (personal communications with: Laurel Brent-Bumb, El Dorado Chamber of Commerce, March 24, 2004; Susan Welter, The River Store, March 20, 2004; Nate Rangel, The Adventure

Connection, March 20, 2004; and Michael Gray, El Dorado County Parks and Recreation Department, February 12, 2004). Whitewater boating companies are familiar with the river flows, whereas other people involved with businesses dependant on river flows surveyed indicated that they were somewhat familiar with flows, but could not always discern between specific flow rates.

From 1975 to 1996, there was a three-fold increase in use of this reach for whitewater boating with a range from 40,000 to 60,000 weekend users per year. However, in recent years this rate of increase has not continued (El Dorado County 2001; Table 4.3.6-1.). The proximity of this stretch of the SFAR to population centers such as Sacramento and San Francisco make this a popular destination for whitewater enthusiasts. Commercial rafting outfitters also find this stretch attractive for the same reasons.

Table 4.3.1-1 provides information on the annual number of commercial and non-commercial boaters from 1992 through 2003.

**Table 4.3.1-1. Annual river use from 1992 through 2003.**

Year	Non-commercial	Commercial	Total
1992	37100	78800	115,900
1993	47000	91500	138,500
1994	45000	73000	118,000
1995	42500	105000	147,500
1996	48700	94450	143,150
1997	45900	90750	136,650
1998	32000	76900	108,900
1999	38000	80900	118,900
2000	33600	89100	122,700
2001	15200	45750	60,950
2002	26500	60100	86,600
2003	30400	59450	89,850
<b>Average Annual River Use</b>	36,825	78,808	115,633

Source: 2003 Annual Report on the River Management Plan.

Commercial rafting outfitters use campgrounds and parking areas along the river. There are also a number of small businesses located along the SFAR primarily in the towns of Lotus and Coloma (El Dorado County 2001). Table 4.3.1-2 lists those facilities that are located along the SFAR within the river reach between Chili Bar and Folsom Lake. The river miles identified in this table are as reported in the source document.

**Table 4.3.1-2. Facilities located along the Reach Downstream of Chili Bar.**

Name	Commercial or Public	River Mile
Nugget	Commercial	0
Chili Bar	Commercial/Public	0.5
Miners Creek	BLM Site Launch & Access	3.1
American River Public	Public	5.1
Coloma Resort	Commercial	5.3
Marshall Gold	Public & Commercial Launch	5.7
State Park		



**Table 4.3.1-2. (continued)**

<b>Name</b>	<b>Commercial or Public</b>	<b>River Mile</b>
Point Pleasant	Commercial	5.8
Ponderosa Park	Public & Commercial	7.3
Highway 49 Bridge	Public	7.4
Beaver Point	Commercial	7.6
McGinnis	Commercial	7.7
Henningsen Lotus	Commercial/Public	8.0
Camp Lotus	Public & Commercial	9.0
Environmental	Private	9.7
Traveling Companions		
Chuck Bacchi Ranch	Commercial	10
Rivers Bend	Commercial	10.5
Motherlode	Commercial	11
Gold Rush	Commercial	11.2
Clark Mtn.	BLM	12.2
Ed Bacchi	Commercial	14
Skunk Hollow	Private	20.5
Salmon Falls	Commercial	20.7

Source: El Dorado County River Management Plan Phase II Report 1996.

There are a number of agencies responsible for managing the land and various recreation and wildlife programs along the river. The responsibilities of these agencies are summarized below:

- El Dorado County Parks and Recreation responsible for managing recreation on the SFAR and preparing the River Management Plan.
- BLM manages 4,164 acres of federal lands below Chili Bar along the SFAR.
- California Parks and Recreation Department: manages the Marshall Gold Discovery State Park in Coloma and Folsom Lake State Recreation Area.
- California Department of Boating and Waterways oversees statewide recreational boating programs including boating safety and education, marine enforcement, and waterways planning.
- California Department of Fish and Game (CDFG): manages fish and wildlife resources.
- El Dorado County Sheriff's Department: enforces all State and County ordinances.

Currently, there are 44 active permits issued through El Dorado County Parks and Recreation for commercial rafting and kayaking enterprises (personal communication with Michael Gray, El Dorado County Parks and Recreation Department, February 12, 2004). These river use permits are renewable every three years.

Permits for commercial camping and lunch breaks on public lands are issued through the BLM and are required for commercial boating trips. Private boaters and non-profit organizations do not pay user fees, nor are there any limits on the number of "user days" they utilize (Bricker 1998). The majority of the boaters (95.4%) are residents of California, with an annual household income between \$40,000 - \$50,000. Most users (approximately 66%) are over 30 years old. Approximately 70 percent of users come to the SFAR for rafting and approximately 30 percent are kayakers. (Bricker 1998)

An economic assessment was prepared in 1996 and included in the River Management Plan Phase II Report prepared by El Dorado County. The focus of the assessment was to look at the economic context of existing river use and planning options (El Dorado County 1996). The assessment included an estimate of gross revenues as well as earnings. The results of the analysis are summarized below. More detailed results can be found in Appendix A. The detailed analysis includes estimates of expenditure types including lodging, food, gas, parking, outfitters, put-in and take-out fees, and other miscellaneous expenses.

The assessment determined that an average expenditure per day differed between those using commercial services and those using the river on their own. Per day expenditures ranged from approximately \$90.00 to \$114.00 per day for commercial boaters and were approximately \$60.00 per day for private users. The total annual output in dollars in the SFAR region ranged between \$13.4 million and \$17 million. This range included direct expenditures and indirect impacts resulting from those expenditures. When looking at earnings in the region that resulted from the gross expenditures discussed above, it was estimated that whitewater boating accounts for \$4.6 million to \$5.9 million of earnings in the South Fork region. The assessment also determined that this translates into the creation of an estimated 206 to 257 jobs (El Dorado County 1996).

The values presented above were based on river use in 1996. In recent years, the use has been somewhat less than in the mid 1990s. For example, in 2003 there were 59,540 commercial boaters and 30,400 private boaters. However, as reported by the El Dorado Chamber of Commerce, the present value of the whitewater boating industry in El Dorado County is approximately \$33 million (personal communication with Laurel Brent-Bumb El Dorado County Chamber of Commerce, March 24, 2004).

#### 4.3.2 Taxes and Fees Attributable to Whitewater Boaters at the SFAR

County government agencies receive financial support from the people using the resource through the contributions resulting from transient occupancy taxes, sales taxes, property taxes, and business licenses. A summary of the estimated contributions to El Dorado County in 1995 based on the expenditures discussed above is presented below.

Transient occupancy tax is assessed to hotels, motels and campgrounds for lodging. It is assessed at 6 percent of gross receipts collected. The boating community would have provided \$26,914 to El Dorado County in 1995 through the transient occupancy tax. Sales taxes to El Dorado County are assessed at 1.25 percent of gross receipts. This would translate into a range of \$158,242 to \$202,959. A property tax is assessed by El Dorado County to commercial outfitters who have equipment in El Dorado County. In 1995, nine commercial operators were assessed approximately \$3,145. An annual business license is also assessed to commercial outfitters by El Dorado County. The fee for the license is \$22, providing El Dorado County with approximately \$880 in 1995. Commercial outfitters are also assessed a possessory interest tax (PIT) which is an in-lieu property tax on private beneficial use of public property. In this case it is the SFAR. The charge is a rate of \$8.25 per weekend user day. Estimated annual PIT collections in 1995 were approx. \$22,500 (El Dorado County 1996). El Dorado County had not been able to provide updated information on the taxes and fees discussed above at the time of the preparation of this report.

### 4.3.3 Response to Survey Interviews

As part of collecting information for this report a non-statistical survey of individuals with knowledge of local socioeconomic conditions was performed. Those interviewed included business owners, real estate agents, Chamber of Commerce/Economic Development Office/and appropriate County Officials, Public Lands Managers and Law Enforcement. Presented below (Table 4.3.3-1) is a summary of the responses to the interviews.

#### Real Estate Agents

The general consensus of those interviewed is that real estate values throughout the county, including the Reach Downstream of Chili Bar, are increasing. The highest values for real estate are along the river and in the valley near the river. Recent listings had the average home at approximately \$500,000 (GLPW Group Inc., web site accessed February 20, 2004). Those interviewed also felt that the local economy along the SFAR is tied to the whitewater business. However, based on responses of those interviewed, it was not clear if SFAR flows had an effect on residential real estate values.

**Table 4.3.3-1. Responses by real estate agents to survey interviews.**

Establishment	Contact	Comment Summary
ReMax Gold – Real Estate	Judy Huestis	<ul style="list-style-type: none"> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Property values throughout the county are increasing.</li> <li>- Values highest along river and in valley near river.</li> <li>- Median value for houses is approx. \$300,000.</li> <li>- People move to area because of the unique community and to live and work on SFAR.</li> <li>- If whitewater businesses suffer and leave than businesses supported by whitewater business suffer and real estate values would decrease as demand decreases.</li> </ul>
ERA Realty	Liz Boyd	<ul style="list-style-type: none"> <li>- No sense of general magnitude, duration and frequency of various flows in SFAR.</li> <li>- The more predictable flows are the better for local companies.</li> <li>- Real estate values are rising on and near the river.</li> <li>- Reliability and predictability of river flows have no effect on property values</li> </ul>
American Heritage Land and Home	Mannie Shaffer	<ul style="list-style-type: none"> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Reliable flows are better for the local economy.</li> <li>- Lack of predictable flows can lead to bad reputation.</li> <li>- Property values are rising overall.</li> <li>- Riverfront real estate is the highest, with off river less but still high.</li> <li>- Reliability and predictability of river flows will not have an effect on property values in the short term, however, it would have long term effects if lack of predictability and reliability were to continue.</li> <li>- Most people move to area because of less pressure, relaxing environment and stable taxes.</li> </ul>

**Business Owners**

Businesses in the Coloma-Lotus area have developed to support tourism and recreation needs. Businesses that service vacationers and people using the river are connected to a certain degree to the whitewater boaters. As mentioned earlier in this report, whitewater boating is the most popular form of outdoor recreation associated with the Reach Downstream of Chili Bar attracting between approximately 60,000 to 150,000 users each year since 1992 (El Dorado County 2003). There is a general feeling from the people interviewed that their businesses and the economic health of the community adjacent to the SFAR are dependant on the river flows in the SFAR. The dependability and reliability of the river flows were reported to be the most important aspects that can have an effect to the individual businesses and the economic conditions in the area adjacent to the SFAR. Most water related businesses have a small full time/year round staff but employ a larger number of seasonal staff coinciding with the whitewater boating season, typically April – October. Individuals surveyed (Table 4.3.3-2) indicated that people who visit the area for boating would travel 1 – 4 hours to get to the SFAR. Because of this, there was also a feeling expressed by some individuals that their businesses would do better if there was some way to predict in advance flow releases so people from away could better and more confidently plan their travel to the SFAR. Their concern is that if people travel to the SFAR and do not experience river flows as expected that they may not return to recreate on the SFAR and that would have an effect on the local businesses.

**Table 4.3.3-2 Responses by business owners to survey interviews .**

Camp Lotus	Bill Center	<ul style="list-style-type: none"> <li>- Riverside Campground. Company is dependant on river flows in the SFAR.</li> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Employs two full time year round people and 8-10 part time people seasonally (March – October).</li> <li>- Annual payroll of \$50,000 - \$60,000.</li> <li>- Approx. 10,000 – 15,000 people annually use their business with an average expenditure of \$25 - \$30 per night.</li> <li>- 50 – 60 percent of customers travel 1 – 4 hours to use the business.</li> <li>- When flows are not dependable the economic conditions in the valley takes a huge dive in the summertime. Businesses that were built up in the 1990’s have been reduced more to seasonal because river flows are not reliable.</li> <li>- 80 – 90 percent of their business is dependant on boatable and predictable/reliable flows. The dependability and predictability of flows is the most important-vital to the business</li> <li>- At a minimum, whitewater boaters need 1,000 – 1,100 cfs to get people to the SFAR. However, really need flows to be at the 1,500 cfs level.</li> <li>- Approximately 50 – 60 percent of customers are repeat customers.</li> <li>- Without reliable summer boating flows on the SFAR they probably would not go out of business as they would find some way to get through. Over the past five years they have evolved into some other activities.</li> </ul>
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**Table 4.3.3-2. (continued)**

<p>Motherlode River Center</p>	<p>Scott Underwood</p>	<ul style="list-style-type: none"> <li>- Whitewater rafting outfitter. Company is dependant on river flows in the SFAR.</li> <li>- Employs two full time year round people. Employs 10 full time and approx. 25 – 30 part time employees during the whitewater boating season (April – September).</li> <li>- July –August are the months that business is most dependant on flows in the river.</li> <li>- Annual payroll of \$100,000</li> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Lack of dependability and predictability of flows hurts the economy regarding whitewater businesses.</li> <li>- 85 percent of their business is dependant on boatable flows in SFAR.</li> <li>- Reputation of not having dependable flows would hurt the business.</li> <li>- Flow levels below 1,200 cfs can cause a substantial change in business.</li> <li>- Approx. 1,500 people per year use their services and expend an average of \$130 per day.</li> <li>- Most people travel 1-4 hrs to use their business.</li> <li>- There are no advanced notices of flow releases provided. This profoundly impacts ability to book groups.</li> <li>- Unable to reap benefits of peak use times because we don't know when water will be provided.</li> <li>- Business would last one year if there were not reliable summer boating flows on the SFAR.</li> </ul>
<p>Adventure Connection</p>	<p>Nate Rangel</p>	<ul style="list-style-type: none"> <li>- Whitewater rafting company. Business is dependant on river flows.</li> <li>- Employs two full time year round people and 20 part time/full time people seasonally (May – September).</li> <li>- Annual payroll of \$140,000.</li> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- The economic health of the region is absolutely dependant on predictability of flows. Lack of dependability would hurt revenues.</li> <li>- 100 percent of their business is dependant on boatable flows. The dependability and predictability of flows is the most important-vital to the business.</li> <li>- River flows below 1,200 cfs would cause a problem for boating.</li> <li>- Approx. 4,000 – 6,000 people per year use their services and expend an average of \$175 per day.</li> <li>- Most people travel 1-4 hours to use their business.</li> <li>- Can't run business without knowing what the river experience will be, it is hard to get people to commit.</li> <li>- Based on 2001 season, business would last one year if there were no reliable summer boating flows on the SFAR.</li> </ul>

**Table 4.3.3-2. (continued)**

<p>Coloma Country Inn</p>	<p>Candie Bliss</p>	<ul style="list-style-type: none"> <li>- Bed and Breakfast in Coloma. Business is dependant on river flows, with April – October being the months most dependent on river flows.</li> <li>- Dependant on outfitters for their customers. The majority of their business is from whitewater boaters during April – October.</li> <li>- Approx. 2,000 – 3,000 people annually use their business with an average expenditure of \$150 per night. (approximately - \$70 per person)</li> <li>- Employs 5 – 9 people. One employee full time year round, the rest are seasonal.</li> <li>- Annual payroll of \$40,000</li> <li>- Does not have a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Whitewater rafters need dependable/predictable flows to bring their customers to SFAR. They in turn house the rafters at their bed and breakfast.</li> <li>- Dependability and predictability are vital to their business- without it they could not survive.</li> <li>- Business probably would not recover if certain flows in the river were expected and that did not occur. Business was down 40 percent in 2001 and still has not recovered from those conditions.</li> </ul>
<p>Earthtrek Expeditions</p>	<p>Jerry Ashburn</p>	<ul style="list-style-type: none"> <li>- Whitewater rafting company. Business is dependant on river flows, with 100 percent being dependant on boatable flows in the SFAR. Business is most dependent on flows in the SFAR from May – September with July/August effect the business the most.</li> <li>- Employs one full time year round person and 20 – 30 part time people per day seasonally (April – September).</li> <li>- Annual payroll of \$250,000.</li> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Community would become ghost town without river flows. Most businesses would close.</li> <li>- Dependability of flows is directly related to their business.</li> <li>- River flows below 1,000 cfs and above 4,000 cfs would cause a change in business.</li> <li>- Approximately 5,000 people use their services annually with a 50/50 split between 1-4 hr travel and 4-8 hours of travel to reach SFAR.</li> <li>- Average expenditures per person are \$100 for a one-day trip and \$250 for a two-day trip.</li> <li>- If there were no reliable summer boating flows on SFAR they would need to diversify but probably would not be in business more than a year.</li> </ul>
<p>Whitewater Excitement</p>	<p>Nate Tucker</p>	<ul style="list-style-type: none"> <li>- Whitewater rafting company. Business is dependant on river flows. Boatable flows are very important to the business. Business is most dependent on flows in the SFAR flows during June/July effecting the business the most.</li> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Employs three full time year round people and 30 part time people seasonally (April – September).</li> <li>- River flows below 1,000 cfs could cause a substantial change in business.</li> </ul>

**Table 4.3.3-2. (continued)**

The River Store	Sue Welter	<ul style="list-style-type: none"> <li>- Retail establishment for specialty whitewater and outdoors interests. They employ 4 – 6 seasonal employees.</li> <li>- There is a direct correlation between the dependability and predictability of flows and the economic health of the region. People who are close by can readily utilize SFAR when flows are good. However, people from away have to commit to a trip before they know for sure what the flow conditions may be. If there are no flows then they may not come back. Having a sense of future releases by the week would be very valuable.</li> <li>- Annual payroll is approximately \$47,000</li> <li>- Has a sense for the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- Business is dependant on river flows from March – end of October, with June – August being the months that affect the business the most.</li> <li>- Business is more dependent on river flows than other conditions. As long as there is water, people will come.</li> <li>- They are 99 percent dependent on boatable flows because they are located in a destination area for whitewater boating.</li> <li>- If certain flows were expected and it did not occur more than once then customers may go elsewhere from the SFAR.</li> <li>- River flows of 1,200 cfs – 2,000 cfs is when most people come out to SFAR.</li> <li>- If there were no reliable summer boating flows on SFAR they may go out of business that season, but would depend on if there was some future warning of these conditions.</li> </ul>
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Chamber of Commerce/Economic Development Office/and appropriate County Officials

Tourism was identified as the primary sector that the local economy consists of and, more specifically, adventure recreation and the rafting industry in El Dorado County brings about \$33 million to the county. Individuals interviewed (Table 4.3.3-3) indicated that the relationship between the dependability and predictability of flows on the SFAR is critical to the economic health of the region and to those businesses that operate on the SFAR. It was commented that pretty much every business in the Coloma-Lotus area is dependant on the rafting industry, which affects hundreds of employees. Their busiest periods coincide with the whitewater rafting season (April – September).

The funding of the county park programs is also dependant on whitewater rafters through the fees they pay to the county. Sustaining the county’s River Management Program reportedly would be difficult if money did not come in from whitewater boaters and the fund may not sustain itself in the long term without reliable flows. Sales taxes generated by whitewater boaters were also identified as another valuable source of funding for the county.

**Table 4.3.3-3. Responses by Chamber of Commerce/Economic Development Office and appropriate County officials to survey interviews.**

El Dorado County Parks and Recreation	Michael Gray	<ul style="list-style-type: none"> <li>- Does not have a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- The relationship between the dependability and predictability of flows in the SFAR is absolutely vital to the river operators and park programs.</li> <li>- Sustaining the river management program would be difficult if money did not come in from the whitewater rafting permit fees.</li> <li>- River permit fees cover the costs in full for maintenance of the River Management Program. Without reliable flows the fund does not sustain itself in the long term.</li> <li>- Currently 44 commercial permits issued to whitewater boaters.</li> <li>- Agreed to provide current river use estimates, financial expenditures and budgets. (Not provided as of the date of this report.)</li> </ul>
El Dorado County Chamber of Commerce	Laurel Brent-Bumb	<ul style="list-style-type: none"> <li>- Has a sense of the general magnitude, duration and frequency of various flows in the SFAR.</li> <li>- The relationship between the dependability and predictability of flows in the SFAR is critical to the economic health of the region.</li> <li>- Pretty much every business in the Coloma-Lotus area is dependant on the rafting industry. There is a major dependence of the local economy on river flows. No water – no rafters- no purchasing of goods.</li> <li>- Hundreds of full time employees are dependant on SFAR river related businesses.</li> <li>- Tourism is the primary sector that the local economy consists of and more specifically adventure recreation.</li> <li>- The rafting industry brings about \$33 million to El Dorado County.</li> <li>- Businesses in Coloma-Lotus would be hard pressed without whitewater boaters. Their busiest periods coincide with the whitewater rafting season (April – September).</li> <li>- Tourism, adventure sports and agri tourism are the fastest growing business sectors. Tourism is the strongest economic engine for the community</li> <li>- People from the bay area move out to El Dorado County. People are attracted by the quality of life when they move to Lotus-Coloma area.</li> <li>- Not much change in residential growth along the SFAR. There has been growth in commercial businesses related to the whitewater boaters and tourists.</li> <li>- Sales taxes generated by whitewater boaters are the most valuable resource to the community from an economic standpoint.</li> <li>- There is a correlation between lodging and restaurant use and users of the SFAR.</li> </ul>
El Dorado County Economic Development	Shawna Purvines	<ul style="list-style-type: none"> <li>- Provided economic data for Coloma-Lotus communities</li> </ul>
El Dorado County Sheriff's Department	Tanya Donnelly	<ul style="list-style-type: none"> <li>- Will facilitate collecting information on budget and need at SFAR.</li> </ul>
El Dorado County Fire Department	Manny Deakuino	<ul style="list-style-type: none"> <li>- There is a search and rescue unit but could not say how much used at SFAR and associated costs.</li> </ul>



## Public Land Managers

The BLM manages 4,164 acres of federal lands below Chili Bar along the SFAR. The amount of funds that are used to support the management of BLM lands adjacent to the SFAR are related to fees charged to outfitters and campers. BLM agreed to provide current information regarding budgets, fees and revenue as it applies to this, however, this information had not been provided by the time of the preparation of this report. There is less a relationship between boaters and the Marshall Gold Discovery State Park, as reportedly only about 5 percent of users are whitewater boaters. Table 4.3.3-4 below includes responses by public land managers to survey interviews.

**Table 4.3.3-4. Responses by public land managers to survey interviews**

Bureau of Land Management	Jim Eicher	<ul style="list-style-type: none"> <li>- Will provide information on the current annual budget and fees charged to outfitters and camping and revenue for 2003.</li> <li>- Referred interviewee to Michael Gray, El Dorado County Parks and Recreation for river use estimates and other budget information.</li> </ul>
Marshall Gold Discovery State Park	John Hutchinson	<ul style="list-style-type: none"> <li>- Manages this state historic park.</li> <li>- No sense of general magnitude, duration and frequency of various flows in SFAR.</li> <li>- The relationship between dependability and predictability of flows in the SFAR is important for whitewater boaters and the businesses that support them.</li> <li>- This does not effect the park because the vast majority of people that visit the park are to enjoy historic values and not for water access.</li> <li>- About 5 percent of visitors are whitewater boaters who stop in to have lunch.</li> <li>- Minimal costs and income to the park from SFAR.</li> <li>- Minimal cost and income to the park result from the predictability and reliability of SFAR flows.</li> </ul>

### 4.3.4 Costs for Providing Services

#### **El Dorado County**

El Dorado County was contacted for current information pertaining to the costs for river and park management services but had not provided detailed information by the time this report was issued.

***River Management*** – The El Dorado County Parks and Recreation Division is the lead agency in management of the SFAR. The Parks and Recreation Division reviews commercial outfitters permits, non-commercial boaters and related river land use. The Division also manages the River Trust Fund. The River Trust Fund is an account intended to provide the sole source of funding for river management by the Parks and Recreation Division. Revenues for the fund are from primarily commercial outfitter permits, and user day fees. The fee for a user day is \$2. Outfitter permits are issued for a three-year period. The fee is \$300 for the first year, then \$150 and \$100

in years two and three, respectively. Revenue for the Trust Fund in 2002 was approximately \$73,000 (El Dorado County 2003).

***Henningsen-Lotus Park*** – The El Dorado County Parks and Recreation Division manages the Henningsen-Lotus Park, which borders the SFAR. Park staff estimated in 1995 that approximately 75 percent of the parks use in the summer is boating related. The annual cost of operation of the park is generated through user fees. Commercial boaters are charged put-in and take-out fees of \$6 per raft and \$2 per kayak. Private users are charged put-in and take-out fees of \$3 per raft and \$1 per kayak. Total revenue from users fees in 1996 was approximately \$25,000 (El Dorado County 1996).

The El Dorado County Sheriff's Office oversees activities throughout the county, including the SFAR. There is a boating safety unit that oversees water related activities. These activities may include law enforcement, rescue, and education. The average cost of providing services, not including search and rescue efforts on the SFAR in 1996, was \$107,000. Search and rescue efforts are reimbursed from the State of California (El Dorado County 1996). The El Dorado County Fire Protection District provides fire protection, emergency medical care and assistance on search and rescue efforts throughout the county. Although they respond to emergency calls along the SFAR, however, they could not provide detailed financial information by the time this report was issued.

The El Dorado County Department of Environmental Management performs health inspections on facilities providing food services to commercial rafting companies. The Department issues a seasonal permit to commercial outfitters. The permit covers one site visit with any additional visits charged at an hourly rate.

### **U.S. Bureau of Land Management**

In 1995, the Folsom District Office of the BLM spent approximately 25 percent of its time on the SFAR. The BLM estimated that the cost of providing the needed services was approximately \$21,000 annually. The BLM charges outfitters a fee of three percent total gross receipts as well as fees for lunch stops and camping along the river. In 1995, the BLM estimated that they collected between \$17,000 - \$20,000 in fees for use of the lands along the SFAR from commercial outfitters. The BLM was contacted during this study but had not provided records of the current budget and 2003 expenditures by the time this report was completed.

### **California Department of Parks and Recreation**

The Marshall Gold Discovery State Historic Park is located along the SFAR in the town of Coloma. The purpose of the park is to secure for the people and make available for their observation the gold discovery site and it's environs at the time of the discovery of gold and the gold rush (California State Parks web site: [www.parks.ca.gov](http://www.parks.ca.gov)). Park staff believes that only about five percent of visitors are whitewater boaters (personal communication with John Hutchinson, Marshall Gold State Park, February 12, 2004).

The Salmon Falls Area is the take-out area for many boaters of the SFAR. The cost of maintaining this facility in 1995–1996 was estimated at approximately \$74,000. The costs of managing and maintaining the Salmon Falls facility is funded through commercial outfitter fees. Commercial outfitters are charged an annual fee and a fee per boat using the take out. Staff indicated in 1995 that funding was adequate for the available services (El Dorado County 1996).

### **American River Conservancy**

The American River Conservancy is a non-profit organization with a mission to improve the SFAR through conservation and education. The Conservancy operates the Chili Bar put-in facility. The 1995 budget for operating the Chili Bar put-in facility was \$96,480 with funding provided through user fees from commercial as well as private boaters and parking fees. In 1995, the revenue from these three sources totaled \$90,701 (El Dorado County 1996).

## **5.0 LITERATURE CITED**

BLM 2003. The South Fork American River. A Draft Management Plan. Folsom Field Office. March 2003.

Bricker, K.S. (1998). Place and Preference: A Study of Whitewater Recreationists on the South Fork American River. Unpublished Dissertation: The Pennsylvania State University.

El Dorado County Office of Education, 2002  
(<http://www.edcoe.k12.ca.us/deptsrvs/distfin/distfin.html>)

El Dorado County. 1996. El Dorado County River Management Plan Phase II Report. El Dorado County, 1996.

El Dorado County. 2001. El Dorado County River Management Plan, Environmental Stewardship and Planning, October 2001

El Dorado County. 2003. El Dorado County River Management Plan. Draft 2003 Annual Report. El Dorado County, 2003.

SMUD (Sacramento Municipal Utility District) July 2001. Upper American River Project, Initial Information Package

Sacramento Area Council of Governments, Regional Data Center. (<http://sacog.org>)

State of California, Employment Development Department, Labor Market Information Division, EL Dorado County. (<http://www.calmis.cahwnet.gov/htmlfile/county/eldorado.htm>)

U.S. Census Bureau, 2000 Census.

U.S. Census Bureau, 1997 Economic Census: Summary Statistics for El Dorado County, CA

# APPENDIX A

## WHITEWATER BOATER EXPENDITURES

**Source: EL Dorado County River  
Management Plan Update; Phase II  
Report, 1996**

- Average Expenditures per Boaters Per Day. Mailback Survey Results – All Boaters ..... A-1
- Average Expenditures per Boaters Per Day. Private Boaters ..... A-2
- Average Expenditures per Boaters Per Day. Commercial Boaters – Low Range ..... A-3
- Average Expenditures per Boaters Per Day. Commercial Boaters – High Range ..... A-4
- Economic Impact Analysis – Total Output. Private Boaters ..... A-5
- Economic Impact Analysis – Total Output. Commercial Boaters – Low Range ..... A-6
- Economic Impact Analysis – Total Output. Commercial Boaters – High Range ..... A-7
- Economic Impact Analysis – Earnings Private Boaters ..... A-8
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- Economic Impact Analysis – Earnings. Commercial Boaters – High Range..... A-10
- Economic Impact Analysis – Employment. Private Boaters ..... A-11
- Economic Impact Analysis – Employment. Commercial Boaters – Low Range ..... A-12
- Economic Impact Analysis – Employment. Commercial Boaters – High Range ..... A-13

(Provided in Hardcopy and on CD)

**Table 5-4 Average Expenditures Per Boater Per Day**  
**Mailback Survey Results - All Boaters**

Type of Expenditure	Money Spent Per Day
Hotel/Motel	\$3.36
Camping	\$5.31
Food/Beverages (carry out)	\$9.80
Food/Beverages (eat in)	\$11.76
Gas, Oil, Repairs, Service	\$10.10
Parking	\$4.16
Taxi, Bus, Other Transportation	\$0.36
Guide/Outfitter Services	\$7.82
Put-in/Take-out Fees	\$3.31
Equipment Rental	\$5.80
Admission to Tourist Attractions	\$0.80
Souvenirs, Gifts, Other Non-Food	\$6.19
<b>TOTAL</b>	<b>\$68.77</b>

**Table 5-5 Average Expenditures Per Boater Per Day  
Private Boaters**

Type of Expenditure	Money Spent Per Day
Hotel/Motel	\$3.36
Camping	\$5.31
Food/Beverages (carry out)	\$9.80
Food/Beverages (eat in)	\$11.76
Gas, Oil, Repairs, Service	\$10.10
Parking	\$4.16
Taxi, Bus, Other Transportation	\$0.36
Guide/Outfitter Services	\$0.00
Put-in/Take-out Fees	\$3.31
Equipment Rental	\$5.80
Admission to Tourist Attractions	\$0.80
Souvenirs, Gifts, Other Non-Food	\$6.19
<b>TOTAL</b>	<b>\$60.95</b>

**Table 5-6 Average Expenditures Per Boater Per Day  
Commercial Boaters - Low Range**

Type of Expenditure	Money Spent Per Day
Hotel/Motel	\$3.36
Camping	\$5.31
Food/Beverages (carry out)	\$9.80
Food/Beverages (eat in)	\$11.76
Gas, Oil, Repairs, Service	\$10.10
Parking	\$4.16
Taxi, Bus, Other Transportation	\$0.36
Guide/Outfitter Services	\$36.91
Put-in/Take-out Fees	\$0.00
Equipment Rental	\$0.00
Admission to Tourist Attractions	\$0.80
Souvenirs, Gifts, Other Non-Food	\$6.19
TOTAL	\$88.75

### Commercial Boaters - High Range

Type of Expenditure	Money Spent Per Day
Hotel/Motel	\$3.36
Camping	\$5.31
Food/Beverages (carry out)	\$9.80
Food/Beverages (eat in)	\$11.76
Gas, Oil, Repairs, Service	\$10.10
Parking	\$4.16
Taxi, Bus, Other Transportation	\$0.36
Guide/Outfitter Services	\$61.34
Put-in/Take-out Fees	\$0.00
Equipment Rental	\$0.00
Admission to Tourist Attractions	\$0.80
Souvenirs, Gifts, Other Non-Food	\$6.19
<b>TOTAL</b>	<b>\$113.18</b>



**Table 5-8 Economic Impact Analysis - Total Output  
Private Boaters**

<b>Type of Expenditure</b>	<b>Gross Annual Expenditures</b>	<b>Total Output Multiplier</b>	<b>Total Output</b>
Hotel/Motel	\$151,200	1.6421	\$248,286
Camping	\$238,950	1.6421	\$392,380
Food/Beverages (carry out)	\$159,686	1.6029	\$255,961
Food/Beverages (eat in)	\$529,200	1.4678	\$776,760
Gas, Oil, Repairs, Service	\$112,262	1.4440	\$162,106
Parking	\$187,200	1.7530	\$328,162
Taxi, Bus, Other Transportation	\$16,200	1.6346	\$26,481
Guide/Outfitter Services	\$0	1.6549	\$0
Put-in/Take-out Fees	\$148,950	1.6549	\$246,497
Equipment Rental	\$261,000	1.6549	\$431,929
Admission to Tourist Attractions	\$36,000	1.6549	\$59,576
Souvenirs, Gifts, Other Non-Food	\$138,857	1.6029	\$222,574
<b>TOTAL</b>	<b>\$1,979,505</b>		<b>\$3,150,712</b>

**Table 5-9 Economic Impact Analysis - Total Output  
Commercial Boaters - Low Range**

Type of Expenditure	Gross Annual Expenditures	Total Output Multiplier	Total Output
Hotel/Motel	\$297,360	1.6421	\$488,295
Camping	\$469,935	1.6421	\$771,680
Food/Beverages (carry out)	\$314,049	1.6029	\$503,389
Food/Beverages (eat in)	\$1,040,760	1.4678	\$1,527,628
Gas, Oil, Repairs, Service	\$220,781	1.4440	\$318,808
Parking	\$368,160	1.7530	\$645,384
Taxi, Bus, Other Transportation	\$31,860	1.6346	\$52,078
Guide/Outfitter Services	\$3,266,570	1.6549	\$5,405,847
Put-in/Take-out Fees	\$0	1.6549	\$0
Equipment Rental	\$0	1.6549	\$0
Admission to Tourist Attractions	\$70,800	1.6549	\$117,167
Souvenirs, Gifts, Other Non-Food	\$273,086	1.6029	\$437,730
<b>TOTAL</b>	<b>\$6,353,361</b>		<b>\$10,268,006</b>

**Table 5-10 Economic Impact Analysis - Total Output  
Commercial Boaters - High Range**

<b>Type of Expenditure</b>	<b>Gross Annual Expenditures</b>	<b>Total Output Multiplier</b>	<b>Total Output</b>
Hotel/Motel	\$297,360	1.6421	\$488,295
Camping	\$469,935	1.6421	\$771,680
Food/Beverages (carry out)	\$314,049	1.6029	\$503,389
Food/Beverages (eat in)	\$1,040,760	1.4678	\$1,527,628
Gas, Oil, Repairs, Service	\$220,781	1.4440	\$318,808
Parking	\$368,160	1.7530	\$645,384
Taxi, Bus, Other Transportation	\$31,860	1.6346	\$52,078
Guide/Outfitter Services	\$5,428,236	1.6549	\$8,983,188
Put-in/Take-out Fees	\$0	1.6549	\$0
Equipment Rental	\$0	1.6549	\$0
Admission to Tourist Attractions	\$70,800	1.6549	\$117,167
Souvenirs, Gifts, Other Non-Food	\$273,086	1.6029	\$437,730
<b>TOTAL</b>	<b>\$8,515,027</b>		<b>\$13,845,347</b>

**Table 5-11**  
**Economic Impact Analysis - Earnings**  
**Private Boaters**

Type of Expenditure	Gross Annual Expenditures	Total Earnings Multiplier	Total Earnings
Hotel/Motel	\$151,200	0.5780	\$87,394
Camping	\$238,950	0.5780	\$138,113
Food/Beverages (carry out)	\$159,686	0.6218	\$99,293
Food/Beverages (eat in)	\$529,200	0.4667	\$246,978
Gas, Oil, Repairs, Service	\$112,262	0.4231	\$47,498
Parking	\$187,200	0.4817	\$90,174
Taxi, Bus, Other Transportation	\$16,200	0.7717	\$12,502
Guide/Outfitter Services	\$0	0.5880	\$0
Put-in/Take-out Fees	\$148,950	0.5880	\$87,583
Equipment Rental	\$261,000	0.5880	\$153,468
Admission to Tourist Attractions	\$36,000	0.5880	\$21,168
Souvenirs, Gifts, Other Non-Food	\$138,857	0.6218	\$86,341
<b>TOTAL</b>	<b>\$1,979,505</b>		<b>\$1,070,512</b>

**Table 5-12**  
**Economic Impact Analysis - Earnings**  
**Commercial Boaters - Low Range**

<b>Type of Expenditure</b>	<b>Gross Annual Expenditures</b>	<b>Total Earnings Multiplier</b>	<b>Total Earnings</b>
Hotel/Motel	\$297,360	0.5780	\$171,874
Camping	\$469,935	0.5780	\$271,622
Food/Beverages (carry out)	\$314,049	0.6218	\$195,276
Food/Beverages (eat in)	\$1,040,760	0.4667	\$485,723
Gas, Oil, Repairs, Service	\$220,781	0.4231	\$93,412
Parking	\$368,160	0.4817	\$177,343
Taxi, Bus, Other Transportation	\$31,860	0.7717	\$24,586
Guide/Outfitter Services	\$3,266,570	0.5880	\$1,920,743
Put-in/Take-out Fees	\$0	0.5880	\$0
Equipment Rental	\$0	0.5880	\$0
Admission to Tourist Attractions	\$70,800	0.5880	\$41,630
Souvenirs, Gifts, Other Non-Food	\$273,086	0.6218	\$169,805
<b>TOTAL</b>	<b>\$6,353,361</b>		<b>\$3,552,014</b>

**Table 5-13 Economic Impact Analysis - Earnings  
Commercial Boaters - High Range**

<b>Type of Expenditure</b>	<b>Gross Annual Expenditures</b>	<b>Total Earnings Multiplier</b>	<b>Total Earnings</b>
Hotel/Motel	\$297,360	0.5780	\$171,874
Camping	\$469,935	0.5780	\$271,622
Food/Beverages (carry out)	\$314,049	0.6218	\$195,276
Food/Beverages (eat in)	\$1,040,760	0.4667	\$485,723
Gas, Oil, Repairs, Service	\$220,781	0.4231	\$93,412
Parking	\$368,160	0.4817	\$177,343
Taxi, Bus, Other Transportation	\$31,860	0.7717	\$24,586
Guide/Outfitter Services	\$5,428,236	0.5880	\$3,191,803
Put-in/Take-out Fees	\$0	0.5880	\$0
Equipment Rental	\$0	0.5880	\$0
Admission to Tourist Attractions	\$70,800	0.5880	\$41,630
Souvenirs, Gifts, Other Non-Food	\$273,086	0.6218	\$169,805
<b>TOTAL</b>	<b>\$8,515,027</b>		<b>\$4,823,074</b>

**Table 5-14 Economic Impact Analysis - Employment  
Private Boaters**

<b>Type of Expenditure</b>	<b>Gross Annual Expenditures</b>	<b>Total Employment Multiplier</b>	<b>Total Employment</b>
Hotel/Motel	\$151,200	23.6	4
Camping	\$238,950	23.6	6
Food/Beverages (carry out)	\$159,686	26.6	4
Food/Beverages (eat in)	\$529,200	27.9	15
Gas, Oil, Repairs, Service	\$112,262	15.6	2
Parking	\$187,200	25.9	5
Taxi, Bus, Other Transportation	\$16,200	30.4	0
Guide/Outfitter Services	\$0	23.6	0
Put-in/Take-out Fees	\$148,950	23.6	4
Equipment Rental	\$261,000	23.6	6
Admission to Tourist Attractions	\$36,000	23.6	1
Souvenirs, Gifts, Other Non-Food	\$138,857	26.6	4
<b>TOTAL</b>	<b>\$1,979,505</b>		<b>51</b>

**Table 5-15 Economic Impact Analysis - Employment  
Commercial Boaters - Low Range**

Type of Expenditure	Gross Annual Expenditures	Total Employment Multiplier	Total Employment
Hotel/Motel	\$297,360	23.6	7
Camping	\$469,935	23.6	11
Food/Beverages (carry out)	\$314,049	26.6	8
Food/Beverages (eat in)	\$1,040,760	27.9	29
Gas, Oil, Repairs, Service	\$220,781	15.6	3
Parking	\$368,160	25.9	10
Taxi, Bus, Other Transportation	\$31,860	30.4	1
Guide/Outfitter Services	\$3,266,570	23.6	77
Put-in/Take-out Fees	\$0	23.6	0
Equipment Rental	\$0	23.6	0
Admission to Tourist Attractions	\$70,800	23.6	2
Souvenirs, Gifts, Other Non-Food	\$273,086	26.6	7
<b>TOTAL</b>	<b>\$6,353,361</b>		<b>155</b>



**Table 5-16 Economic Impact Analysis - Employment  
Commercial Boaters - High Range**

Type of Expenditure	Gross Annual Expenditures	Total Employment Multiplier	Total Employment
Hotel/Motel	\$297,360	23.6	7
Camping	\$469,935	23.6	11
Food/Beverages (carry out)	\$314,049	26.6	8
Food/Beverages (eat in)	\$1,040,760	27.9	29
Gas, Oil, Repairs, Service	\$220,781	15.6	3
Parking	\$368,160	25.9	10
Taxi, Bus, Other Transportation	\$31,860	30.4	1
Guide/Outfitter Services	\$5,428,236	23.6	128
Put-in/Take-out Fees	\$0	23.6	0
Equipment Rental	\$0	23.6	0
Admission to Tourist Attractions	\$70,800	23.6	2
Souvenirs, Gifts, Other Non-Food	\$273,086	26.6	7
<b>TOTAL</b>	<b>\$8,515,027</b>		<b>206</b>

# **APPENDIX B**

## **CHILI BAR SOCIOECONOMICS STUDY PLAN**

(Provided in Hardcopy and on CD)

### **13.0 Chili Bar Socioeconomic Study Plan**

The Chili Bar Socioeconomic Study will consist of reviewing existing data sources and conducting interviews to develop a broad description of the current socioeconomic setting in the 20-mile-long area along the South Fork American River from Chili Bar Dam to, but not including, Folsom Reservoir (referred to in the this study plan as the Reach Downstream of Chili Bar) and how this current socioeconomic setting might be affected by the combined operation of the Chili Bar Project by Pacific Gas and Electric Company and of the Upper American River Project (UARP) by the Sacramento Municipal Utility District (SMUD).

#### **13.1 Pertinent Issue Questions**

2. What are the socioeconomic benefits (direct, indirect and induced) and costs of the UARP and Chili Bar projects to El Dorado County and the Region?

#### **13.2 Background**

Both Pacific Gas and Electric Company and SMUD are in the process of relicensing their projects, with license applications scheduled for filing with the Federal Energy Regulatory Commission (FERC) by July 2005. The Licensees have agreed to jointly perform various “overlapping” studies (studies that are to the joint benefit of PG&E and SMUD in their respective relicensings). One such study is the recently completed Recreation Flow Study that focused entirely in the Reach Downstream of Chili Bar and had the specific objectives of:

- Describe existing fishing, swimming, recreational gold panning, dredging and whitewater boating opportunities and other types of flow-dependent day use activities below Chili Bar Dam.
- Identify the regional significance of existing and potential fishing, swimming, gold panning, dredging, whitewater boating opportunities and other types of flow-dependent day use activities below Chili Bar Dam.
- Determine how water year type, flow (including water temperature) and timing affect these opportunities.
- Identify the minimum, optimum and maximum flow regimes (including timing, duration and volume) for each of the identified flow-dependent recreation opportunities. Provide this information to the Aquatics TWG to determine if the Aquatics TWG can take advantage of the identified flows for study purposes.
- Answering the pertinent issue questions identified in 7.5.1

To complete that study, the Licensees interviewed local businesses and agencies.

This Chili Bar Socioeconomic Study is another overlapping study that should be able to take advantage of some information developed in the Recreation Flow Study.

#### **13.3 Study Objectives**

The objectives of the Chili Bar Socioeconomic Study are:

- Provide a broad description of the current socioeconomic setting in the Reach Downstream of Chili Bar.
- Identify how the combined operations of the Chili Bar and UARP projects might affect the current socioeconomic setting into the future.

#### **13.4 Study Area**

The study area will focus primarily on the lands adjoining the Reach Downstream of Chili Bar, with emphasis on the Lotus/Coloma area. Information will be gathered from other areas as well, but the level of effort will, in general, be inversely proportional to the distance from the reach. The presumption is that the more distant an area is from the reach, the less affect flows in the reach have on the socioeconomic setting of that area.

### 13.5 Study Methods

The study will be performed in two steps.

**Step 1: Review Available Information** – The Licensee will review existing sources of socioeconomic information for the reach. These data sources are likely to include: a PhD Thesis by Kelley Bricker for the Planning and Conservation League Study (Executive Director Fred Keeley); information from the Bureau of Land Management; information from El Dorado County documents; information from the El Dorado County Economic Development Office; and information from the Coloma-Lotus Chamber of Commerce. The Licensees have also asked the Bureau and others to identify potential data sources. The goal of this review is to: 1) describe the local and regional population and trends including seasonal changes where possible; and 2) describe in general current economic conditions in housing, construction, recreation and tourism, employment, earnings per capita and tax base. Information on these parameters is typically found by searching the U.S. Census Bureau, U.S. Housing and Urban Development, state and local databases.

**Step 2: Interviews** – The Licensees will perform telephone and face-to-face interviews with individuals who may help add to the description of the current socioeconomic conditions in the study area and how the combined operations of the Projects might affect that condition. Some of the parties the Licensees might attempt to interview include:

- Those individuals interviewed for the Recreation Flow Study
- Kelley Bricker, who performed a socioeconomic study on the reach as part of a PhD thesis
- Bill Center (Camp Lotus)
- Nate Rangel (California Outdoors)
- The 20 or so Commercial Rafting Companies that have permits to run the reach
- Local businesses in the Lotus/Coloma area
- Some of the numerous private landowners whose property abuts the river
- Local clubs and organizations with an interest in recreation
- Coloma-Lotus Chamber of Commerce
- River Management Advisory Committee
- Bureau of Land Management
- El Dorado County Water Agency
- El Dorado County Sheriff's Office
- El Dorado County Tax Assessor's Office
- El Dorado County Planning Department
- El Dorado County Economic Development Office
- El Dorado County Visitor's Authority
- El Dorado County Film Commission
- Local real estate agents
- Local municipalities
- California State Parks – Folsom and Marshall Gold Discovery

Some of the questions that will be asked during the interviews will include:

**To all interviewed:**

- Please describe your relationship with activities associated with the SFAR.
- Where do you live/work in relation to the river?
- How long have you been in the area?
- On average, how often (days/year) do you partake in an activity that brings you to the river? For boating, picnicking, sightseeing, swimming, wildlife viewing, etc?
- Do you have a sense for the general magnitude, duration and frequency of various flow levels in the river? If so, what is your sense of how often the flow is about 200 to 300 cfs; 1,000 to 1,500 cfs; 1,500 cfs or more?

- What is your perspective on the relationship between the dependability and predictability of flows in the SFAR with the economic health of the region? How do you see this affecting the issues that you deal with as part of your business or professional responsibilities?

**To homeowners:**

- Can you see the river from your home?
- How often do you spend the day on or near the river at your house?
- To what extent is your use and enjoyment of the river dependent on/affected by specific flow levels? What are those flow levels?

**To Business Owners:**

- What type of a business do you operate?
- Which business sector is your business within? (retail, recreation, manufacturing, tourism, agriculture)
- How many people do you employ?
- How many FTEs are dependent on SFAR river related businesses?
- How many individual employees are primarily dependent on the SFAR river related business?
- What are the socioeconomic impacts associated with seasonal employment?
- How many adults who are not employees are primarily supported by this business?
- What is the annual payroll of your business? (a range will be provided to choose from)
- Is your business a seasonal business? If so please indicate the months that you operate. (*Jan., Feb., March, ...*)
- Is your business dependant on river flows? (*yes/no*)
- Which months of the year is your business most dependent on flows in the river?
- Which of those months affect your business the most?
- What would happen to your business if you expected a certain flow in the river and it did not occur?
- Can you describe the flow levels that cause a substantial change in your business?
- If you are a commercial outfitter, about what percent of your customers are repeat customers on the SFAR?
- To what extent is your business dependent on flows in the river as compared to other conditions such as roads, general economy, season, weather conditions, local government regulations, etc.?
- If you provide opportunities for river access and/or use please provide the number of people that use your services per year and a breakdown of how far people travel to use your business (*less than 1 hour/ 1 - 4 hours/ 4-8 hours*) and average expenditures per person per visit.
- What percentage of your business is dependent on boatable flows? How important is dependability and predictability of those flows?
- If there were not reliable summer boating flows on the South Fork for a period of time, how long would it be until you went out of business or shut down your business?

**To Chamber of Commerce/Economic Development Office/and appropriate County Officials:**

- How many SFAR related businesses are there in the Georgetown/Placerville/Cameron Park area and the Coloma/Lotus area? Please list the types of river related businesses that are present.
- What does the local economy primarily consist of (*retail, recreation, manufacturing, agriculture, tourism*)?
- Please provide specifics of the sector(s) identified in the question above.
- What is the annual money (as applicable) generated from recreation, tourism, retail, and agricultural sectors.
- What are the fastest growing sectors in the past 5 years?
- How is this growth reflected in housing, retail, commercial, recreational and industrial construction?
- How have the changes in the economy and sectors (identified above) over time affected the make up of the community?
- What are most people looking for when they move to the Coloma/Lotus Community?
- What are most people looking for when they move to the West Slope El Dorado County?
- Why do businesses want to move to/from the community? (*taxes, availability of labor, location, quality of life, municipal services*)

- Why do most people want to move to/from the community? (*employment, retirement, taxes, housing, quality of life, municipal services*)
- Has there been an increase in services for families over the past 10 years i.e.: school construction, school enrollment, health care etc? (*yes/no*)
- If yes please describe.
- What is the most valuable resource to the community from an economic standpoint?
- How many hotel/motel/bed and breakfast rooms are there in the Georgetown/Placerville/Cameron Park area?
- How many hotel/motel/bed and breakfast rooms are there in the Coloma/Lotus area?
- Is there a demand for additional lodging in each of these two areas?
- How many restaurants are there in the Georgetown/Placerville/Cameron Park area?
- How many restaurants are there in the Coloma/Lotus area?
- Is there a demand for additional restaurants in each of these two areas?
- Is there a correlation between lodging and restaurant use and users of the river?
- Has there been a change in the numbers of hotel/motel/bed and breakfast rooms and restaurants in the two areas described above?
- What is the primary reason for the change in numbers of lodging rooms/restaurants in each of these two areas?
- How is the local economy dependant on river flows?
- How many FTEs are dependent on SFAR river related businesses?
- How many individual employees are primarily dependent on the SFAR river related business?
- What are the socioeconomic impacts associated with seasonal employment?
- How many adults who are not employees are primarily supported by this business?

**To Real Estate Agents:**

- Please provide information on general property values by sector (as applicable); riverfront property, off river property, residential, agricultural, commercial, manufacturing/industrial.
- What are the median values of houses, condos, raw land (riverfront/non-riverfront), agricultural land, and commercial real estate?
- What is the trend in property values on or very near to the river over the past 5 years, and how does that trend compare to other properties in the area not on or very near to the river?
- Please provide the number of houses and commercial properties sold over the past 5 years.
- How are taxes in the community viewed? (*high, low, as expected*)
- Does the reliability/predictability of river flows have any effect on property values? (*yes/no*) If yes, please explain.
- Do other factors such as, and not limited to, the actual and potential increase in government owned lands have any affect on property values and marketability?
- Why do most people want to move to/from the community? (*employment, retirement, taxes, housing, quality of life, municipal services*)

**To Public Lands Managers (County Park @ Henningsen's, State Park @ Coloma and Folsom Reservoir, BLM) and Law Enforcement:**

- What are the costs and incomes to your agency that you attribute to the South Fork of the American River?
- How do you see these costs and incomes affected by the predictability and reliability of flows in the river?

**13.5 Study Analysis**

The data will be analyzed and organized to describe the general socioeconomic condition in the principal study area and how the combined operations of the Projects affect this condition.

**13.7            Study Output**

A presentation of the study results will be made to the Socioeconomic TWG. The ultimate study output will be mostly a narrative report with tables and charts. The report will include the following: issue questions, objectives, study area, methods used to collect information, methods used to analyze the data, findings, discussion, conclusion and recommendations. The report will be prepared in a format so that it can easily be incorporated into the Licensees' draft environmental assessment or exhibit E that will be submitted to FERC with the Licensees' applications for new license.

**13.8            TWG and Plenary Group Endorsement**

The Socioeconomic TWG approved the draft study plan on December 12, 2003. The participants at the meeting who said they could "live with" the plan were El Dorado County Water Agency, City of Sacramento, Placer County Water Agency, U.S. Forest Service, American River Recreation Association & Camp Lotus, Taxpayers Association of El Dorado County, Pacific Gas & Electric Company and SMUD. None of the participants at the meeting said they could not "live with" the draft study plan. Several participants, including EDCWA and Taxpayers Association of El Dorado County, stated their approval was conditional upon EDCWA and SMUD meeting to discuss issues identified on page 4 of EDCWA's October 10, 2003, letter to David Hanson, SMUD.

The Plenary Group approved this plan on January 7, 2004. The participants at the meeting who said they could "live with" this study plan were the U.S. Forest Service, American River Recreation Association & Camp Lotus, El Dorado County Water Agency, El Dorado County, El Dorado Irrigation District, El Dorado County Citizen's for Water, National Park Service, U.S. Bureau of Land Management, Placer County Water Agency, City of Sacramento, California Outdoors, California Department of Fish and Game, Friends of the River, State Water Resources Control Board, and SMUD. None of the participants at the meeting said they could not "live with" this study plan.

**13.9            References**

None