

## **1 STUDY PURPOSE/PROJECT DESCRIPTION**

Under an agreement with the Federal Energy Regulatory Commission, the California Department of Water Resources (DWR) maintains a year round trout fishery in Piru Creek between Pyramid Dam and Frenchman's Flat, located in the Angeles National Forest. To implement this agreement the California Department of Fish and Game releases a total of 3,000 pounds of hatchery raised fish into Piru Creek at Frenchman's Flat between November and May. Trout reproduce naturally upstream of Frenchman's Flat and portions of the stream in this location are considered a catch and release area.

The purpose of this study is to conduct four mid-week and four weekend creel census surveys on randomly selected dates at middle Piru Creek and Frenchman's Flat from October 2003 through April 2004. Creel census surveys were undertaken to determine angler usage of the area and quantify the number and species of fish caught at each location. Surveys were conducted in the middle section of Piru Creek and Frenchman's Flat which are located approximately two miles downstream of Pyramid Dam.

## **2 SURVEY DATES AND CENSUS PERSONNEL**

Creel census surveys were scheduled on the following dates during December 2003. Four mid-week surveys were scheduled on December 12<sup>th</sup>, 19<sup>th</sup>, 22<sup>nd</sup>, 30<sup>th</sup> and four weekend dates were scheduled on December 6<sup>th</sup>, 7<sup>th</sup>, 27<sup>th</sup>, and 28<sup>th</sup>. Aspen biologists conducted creel census training with the CDFG prior to deploying to the field. Field data were recorded for each fisherman present during the survey dates and included information such as type and number of fish caught, length and mass of the fish if not released, angler satisfaction, and age demographics. Creel census surveys in Piru Creek were conducted during the month of December 2003 by Lynn Stafford and Chris Huntley of Aspen Environmental Group, a DWR contractor.

## **3 SUMMARY**

Male fisherman comprise the dominate number of the anglers currently fishing at both Piru Creek and Frenchman's Flat. Of the fifty-two fishermen identified during the survey period, only three women were noted fishing in the project area. Of the fisherman interviewed, approximately 92% indicated they were satisfied with their fishing experience, 66% were satisfied with the size of the fish caught and 58% indicated they were satisfied with the number of fish captured. In addition, most of the fishermen utilizing both Frenchman's Flat and Piru Creek upstream of Frenchman's Flat were fly fisherman and released fish caught in both areas. However, larger numbers of fish were kept by both fly and bait fisherman during the December survey than during the November period. Larger numbers of fishermen utilized the project area on weekends but not in significant numbers. Day use appears to fluctuate with many mid-week anglers using the site during lunch hours and early evening periods. Litter and refuse continue to be problematic at the site and the source of many angler comments. During the Christmas holiday the Los Angeles District of the Conservation Corps removed over six bags of refuse from the creek area. In addition, during slow periods the creel monitor removed 4 bags of litter and recyclables from the parking lot.

Many anglers commented on the lack of flow in Piru Creek and, although they were pleased with the overall fishing experience, they continue to request the following: additional flow in Piru Creek, regular cleaning and waste removal, and the presence of either a CDFG game warden or USFS Ranger to limit illegal fishing and trash dumping. In some instances anglers commented that illegal fishing was taking place and anglers were either not licensed or removing fish from catch and release areas.

Rainbow trout were the primary species sought by all the anglers surveyed and were the only fish species caught and kept during the December survey period. Several anglers identified that bluegill and small mouth bass exist in the gorge area below Frenchman's Flat. Of the 186 fish captured, measurements were obtained for 46 fish. No hatchery marks were identified by the monitor and all fish observed had adipose fins intact. In addition, most fish were caught and released by the anglers prior to inspection by the monitor. A brief summary of the creel census survey results for each site is located below. Table 1 and Table 2 summarize the creel census data, including statistics on measured fish, for the month of December 2003.

**Table 1 Creel Census Data at Piru Creek and Frenchman's Flat December 2003.**

Creel Census Location	Number of Anglers Per Site	Sex/Age Distribution of Anglers		Hours Fished Per Location	Number of Fish Caught	Number of Fish Released	Percent of Anglers Satisfied with Experience		
							Fishing Experience	Size of Fish	Number of Fish
Frenchman's Flat Mid-week	15	<16		37	35	14	100%	67%	73%
		16-30	2 (m)						
		31-45	7 (m) 1 (f)						
		46-55	4 (m)						
		56-65	1 (m)						
>65									
Frenchman's Flat Weekend	19*	<16	5 (m)	55.5	27	11	73%	42%	36%
		16-30	7 (m)						
		31-45	6 (m)						
		46-55	1 (m)						
		56-65							
>65									
Piru Creek Mid-week	18*	<16		54	41	30	100%	78%	67%
		16-30	2 (m)						
		31-45	10 (m)						
		46-55	3 (m)						
		56-65	1 (m)						
>65	2 (m)								
Piru Creek Weekend	24	<16		75	83	83	96%	75%	54%
		16-30	4 (m) 2 (f)						
		31-45	9 (m)						
		46-55	5 (m)						
		56-65	5 (m)						
>65									
Totals	52	<16	5 (m)	221.5	186	138	92%**	66%**	58%**
		16-30	15 (m) 2 (f)						
		31-45	33 (m) 1 (f)						
		46-55	13 (m)						
		56-65	7 (m)						
		>65	2 (m)						

\*Some fisherman fished at two locations.

\*\*Total number of Fisherman combined for both areas.

**Table 2 Summary of Fish Size and Length by Area for Frenchman’s Flat and Upper Piru Creek.**

Creel Census Location	Number of Fish Caught	Number of Fish Measured	Average Length mm	Standard Deviation	Range mm	Average Mass grams	Standard Deviation	Range grams	Hatchery Marks
Frenchman’s Flat Mid-week	35	24	244	34	(180,300)	246	47	(175,320)	Not observed
Frenchman’s Flat Weekend	27	16	246	36	(180-300)	266	46	(180,350)	Not observed
Piru Creek Mid-week	41	8	249	34	(200/280)	261	36	(210/300)	Not observed
Piru Creek Weekend	83	0	0	0	0	0	0	0	Not observed

#### 4. SURVEY RESULTS FRENCHMAN’S FLAT

##### Frenchman’s Flat Mid-Week

- A total of fifteen (15) anglers were identified fishing at Frenchman’s Flat
- Thirty-five (35) fish were caught and twenty-one (21) fish were kept by fisherman during the midweek census period
- Average size of trout was 244 mm with a mass of 246 g
- Of the thirty-five (35) anglers, all were satisfied with their fishing experience
- Ten (10) of thirty-five (35) fisherman were satisfied with the number of fish caught
- Eleven (11) of thirty-five (35) fisherman were satisfied with the size of the fish caught
- With the exception of one (1) women between 31-45 years of age, all other fisherman were male
- Two (2) fishermen were between 16-30, eight (8) fishermen were between 31-45 years of age, four were between 46-55, and one (1) was between 56-65 years of age.

##### Frenchman’s Flat Weekend

A brief summary of creel census survey results is located below:

- A total of nineteen (19) anglers were identified fishing at Frenchman’s Flat
- Twenty-seven (27) fish were caught and sixteen (16) fish were kept during the weekend census period
- Average size of trout was 246 mm with a mass of 266 g
- Fourteen (14) of nineteen (19) fisherman polled were satisfied with their fishing experience
- Eight (8) of nineteen (19) fisherman were satisfied with the number of fish caught
- Seven (7) of nineteen (19) fisherman were satisfied with the size of the fish caught
- All fisherman were male
- Five (5) fishermen were under sixteen years of age, seven (7) were between 16-30, six (6) fisherman were between 31-45 years of age, and one (1) fishermen was between 46-55 years of age.

## 5. SURVEY RESULTS PIRU CREEK

### Piru Creek Mid-Week

- A total of eighteen (18) anglers were identified fishing in Piru Creek
- Forty-one (41) fish were caught and thirty (30) released during the midweek census period
- Average size of trout was 249 mm with a mass of 261 g
- All the fisherman polled were satisfied with their experience
- Fourteen (14) of eighteen (18) fisherman were satisfied with the number of fish caught
- Twelve (12) of eighteen (18) fisherman were satisfied with the size of the fish caught
- All fisherman were male
- Two (2) fishermen were between 16-30 years of age, ten (10) were between 31-45 years of age, three (3) were between 46-55 years of age, one (1) was between 56-65 years of age, and two (2) were over 65 years of age.

### Piru Creek Weekend

- A total of twenty-four (24) anglers were identified fishing in Piru Creek
- One hundred and eighty-six (186) fish were caught and one hundred thirty-eight (138) released during the weekend census period
- No size or mass information was obtained (catch and release area), or anglers declined to have fish measured
- Twenty-three (23) of twenty-four (24) fisherman were satisfied with their experience
- Eighteen (18) of twenty-four (24) fisherman were satisfied with the number of fish caught
- Thirteen (13) of twenty-four (24) fisherman were satisfied with the size of the fish caught
- With the exception of two females between 16-30 years of age and one female between 31-45 years of age, all other anglers were male
- Six (6) fisherman were between 16-30 years of age, nine (9) fisherman were between 31-45, five (5) were between 46-55, and five (5) were between 56-65 years of age.