

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 August 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 March 2004. Five mid-week surveys were scheduled on March 1st, 11th, 12th, 16th and 25th, and four weekend dates were scheduled on March 6th, 7th, 27th, and 28th. Aspen biologists conducted creel census training with the CDFG prior to deploying to the field. Field data were recorded for each angler present during the survey dates and included information including the 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 March 2004 by Chris Huntley, Lynn Stafford, and Christopher Meyer of Aspen Environmental Group, a DWR contractor.

3 SUMMARY

Male anglers continue to comprise the majority of fisherman at both Piru Creek and Frenchman's Flat. Of the one hundred and fifty anglers identified during the survey period, only eleven women were noted fishing in the project area. One single female was noted fishing alone in Frenchman's Flat while all female anglers were identified in the company of other male anglers or parents. Usage by family groups with small children appeared to increase during the March census period and larger numbers of children under sixteen years of age were identified fishing in both Frenchman's Flat and Piru Creek. Of the anglers interviewed, 87% indicated they were satisfied with their general fishing experience. In addition, approximately 63% of the anglers were satisfied with the size of the fish caught and 55% indicated they were satisfied with the number of fish captured. March data indicates a record high angler usage and an increase in both the overall angler satisfaction with their fishing experience and the size and number of fish captured. Despite the high satisfaction with size and number of fish during the survey period, the creel monitor noted that some anglers, who still caught their limit and removed fish from the creek, were not satisfied with the number of fish captured. Conversely, survey information indicates that fly fisherman utilizing upper Piru Creek tend to be satisfied with the number and size of fish when compared to anglers utilizing bait. See Figure 1 and 2 at the end of this report to compare angler satisfaction responses for creel census surveys conducted from October 2003 to March 2004.

Fly fisherman continue to comprise the majority of anglers utilizing both Frenchman's Flat and Piru Creek upstream of Frenchman's Flat and anglers released approximately 58% of fish captured. This is similar to the percentage of fish released during the February survey period (approximately 60%). Most of fish released continue to be captured from the upper Piru Creek area although large numbers of fish

were captured in both Frenchman's Flat and upper Piru Creek. Angler usage remains slightly higher during weekend periods by a factor of approximately two to one. Day use appears to fluctuate with many mid-week anglers using the site during lunch hours and early evening periods. Many anglers who utilize the site midweek appear to be fly fisherman who generally fish in the upper Piru Creek area.

Litter and refuse continue to dominate the majority of complaints received from both anglers and hikers. While recent clean up efforts conducted by the USFS, boy scout troops and good Samaritans temporally removes litter from the area; dense litter, human waste and refuse is common in Frenchman's Flat at the end of each warm weather weekend. Poaching continues to be a concern, however the CDFG has indicated several citations have been issued and the creel monitor noted an increased presence of the CDFG Game Warden in the Piru Creek area. Despite increased presence by law enforcement personnel the monitor has reported that use of nets, spears, and buckets continues to occur on a regular basis.

Anglers continue to request the presence of a kiosk or increased patrolling of the site by the USFS. In addition, there appears to be increased trespassing on to the Pyramid Dam Bridge with anglers reporting that individuals have been throwing empty beer bottles into the rocks at the foot of the bridge, roadways and parking areas.

Additional comments received by anglers during the survey period include:

- Illegal and un-licensed fishing, and hunting occurring in catch and release areas on a regular basis
- Fisherman removing more than the legal limit of fish
- Where is the USFS?
- Arguments occurring between fisherman and bathers
- Poachers removing "ice-chests" of fish from Piru Creek
- Provide additional enforcement of CDFG game laws and maintain law enforcement presence to reduce gang activity, and poaching
- Trash and human waste litter the areas after each weekend
- Place additional Port-A-Potty in the Frenchman's Flat basin
- Need better signage demarcating the catch and release area
- Request additional stocking
- The area requires a full time Kiosk at Frenchman's Flat during weekend periods
- Several anglers have asked how to contact USFS to join docent program for Piru Creek
- Gold panning in Piru Creek resulting in increased turbidity

Rainbow trout remain the primary species sought by all the anglers surveyed and were the only fish species caught and kept during the March survey period. Of the 365 fish captured, measurements were obtained for 151 fish. No hatchery marks were identified by the monitor and all fish observed had intact adipose fins. Stocked fish appeared larger in size and mass than the February survey and several holdovers from previous stocking events and naturally breeding fish were captured. 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 March 2004.

Table 1 Creel Census Data at Piru Creek and Frenchman's Flat March 2004.

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	24	<16	1 (m)	64.5	59	14	88%	54%	54%
		16-30	3 (m)						
		31-45	7 (m)						
		46-55	1 (f) 5 (m)						
		56-65	4 (m)						
>65	4 (m)								
Frenchman's Flat Weekend	35*	<16	2 (m)	86	45	12	74%	54%	37%
		16-30	4 (m)						
		31-45	2 (f) 11(m)						
		46-55	11 (m)						
		56-65	2 (m)						
>65	3 (m)								
Piru Creek Mid-week	32*	<16		115	121	84	90%	72%	78%
		16-30	7 (m)						
		31-45	1 (f) 14 (m)						
		46-55	1 (f) 4 (m)						
		56-65	3 (m)						
>65	2 (m)								
Piru Creek Weekend	59	<16	1 (f) 7 (m)	176	140	102	97%	71%	51%
		16-30	1 (f) 10 (m)						
		31-45	2 (f) 18(m)						
		46-55	1 (f) 13(m)						
		56-65	5 (m)						
>65	1 (m)								
Totals	150	<16	1 (f) 10 (m)	441.5	365	212	87%**	63%**	55%**
		16-30	2 (f) 24 (m)						
		31-45	5 (f) 50 (m)						
		46-55	3 (f) 33 (m)						
		56-65	14 (m)						
>65	10 (m)								

*Some anglers fished at two locations.

**Total number of anglers 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	59	43	234.5	34	(170-340)	248.3	55.5	(160-400)	Not observed
Frenchman's Flat Weekend	45	33	256	34	(170-340)	295.6	56.8	(160-245)	Not observed
Piru Creek Mid-week	121	37	235.7	29	(180-230)	247.6	40	(175-350)	Not observed
Piru Creek Weekend	140	38	232.9	28.5	(15-32)	246	18.4	(150-310)	Not observed

4. SURVEY RESULTS FRENCHMAN'S FLAT

Frenchman's Flat Mid-Week

- A total of twenty-four (24) anglers were identified fishing at Frenchman's Flat
- Fifty-nine (59) fish were caught and forty-five (45) fish were kept by anglers during the midweek census period
- Average size of trout was 234.5 mm with a mass of 248.3 grams.
- Although mass data was available not all anglers appeared willing to have their fish weighed
- Of the twenty-four (24) anglers, twenty-one (21) were satisfied with their fishing experience
- Thirteen (13) of twenty-four (24) anglers were satisfied with the number of fish caught
- Thirteen (13) of twenty-four (24) anglers were satisfied with the size of the fish caught
- With the exception of one female angler, all anglers were male
- One (1) angler was less than sixteen years old, three (3) anglers were between 16-30, seven (7) were between 31-45, six (6) were between 46-55, four (4) were between 56-65, and four (4) were over 65 years of age.

Frenchman's Flat Weekend

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

- A total of thirty-five (35) anglers were identified fishing at Frenchman's Flat
- Forty-five (45) fish were caught and twenty-three (23) fish were kept during the weekend census period
- Average size of trout was 256 mm with a mass of 295.6 grams.
- Although mass data was available not all anglers appeared willing to have their fish weighed
- Twenty-six (26) of thirty-five (35) anglers polled were satisfied with their fishing experience
- Nineteen (19) of thirty-five (35) anglers were satisfied with the number of fish caught
- Thirteen (13) of thirty-five (35) anglers were satisfied with the size of the fish caught
- With the exception of two (2) female anglers, all anglers were male
- Two (2) anglers were less than 16 years of age, four (4) anglers were between 16-30, thirteen (13) anglers were between 31-45 years of age, eleven (11) anglers were between 46-55 years of age, two (2) were between 56-65 years of age, and three (3) were over 65 years of age.

5. SURVEY RESULTS PIRU CREEK

Piru Creek Mid-Week

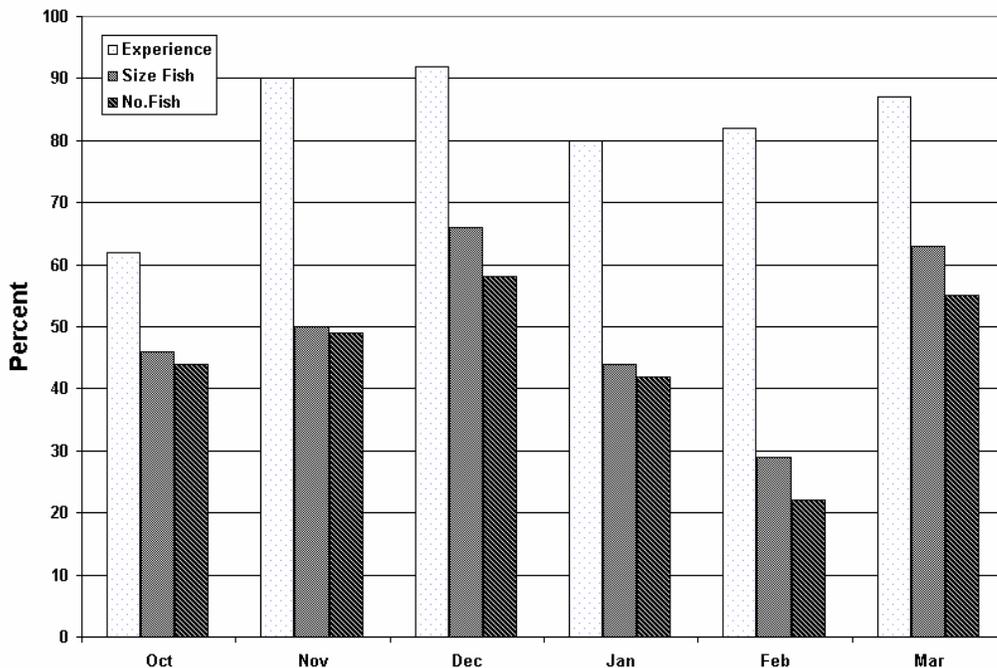
- A total of thirty-two (32) anglers were identified fishing in Piru Creek
- One hundred twenty-one (121) fish were caught and thirty-seven (37) kept during the midweek census period
- Average size of fish was 235.7 mm with a mass of 247.6 grams.
- Twenty-nine (29) of thirty-two (32) anglers were satisfied with their fishing experience
- Twenty-three (23) of thirty-two (32) anglers were satisfied with the number of fish caught
- Twenty-five (25) of thirty-two (32) anglers were satisfied with the size of the fish caught
- With the exception of two (2) female anglers, all other anglers were male

- Seven (7) anglers were between 16-30 years of age, fifteen (15) were between 31-45, five (5) were between 46-55 years, three (3) were between 56-65 years of age, and two (2) were over 65 years of age.

Piru Creek Weekend

- A total of fifty-nine (59) anglers were identified fishing in Piru Creek
- One hundred-forty (140) fish were caught and thirty-eight (38) fish were kept during the weekend census period
- Average size of trout taken was 232.9 mm with a mass of 246 grams
- Fifty-seven (57) of fifty-nine (59) anglers were satisfied with their experience
- Forty-two (42) of fifty-nine (59) anglers were satisfied with the number of fish caught
- Thirty (30) fifty-nine (59) anglers were satisfied with the size of the fish caught
- With the exception of five (5) female anglers, all other anglers were male
- Eight anglers were less than 16 years of age, eleven (11) anglers were between 16-30 years of age, twenty (20) anglers were between 31-45, fourteen (14) were between 46-55, five (5) anglers were between 56-65, and one (1) angler was over 65 years of age.

**Figure 1. Percent Angler Satisfaction
Oct 2003-Mar 2004**



**Figure 2. Total Number of Anglers and Fish Captured
Between Oct 2003 and Mar 2004**

